

COUNTY OF SOLANO

SYSTEMS ANALYST (SENIOR)

DEFINITION

Plans, designs, up-dates, and maintains the most difficult and complex computerized data processing and applications systems for large, multi-departmental or county-wide functions; acts as a project/team leader and technical expert in assigned area(s) of responsibility, provides project management from initiation to implementation and maintenance for designated major systems; and participates as a responsible, cooperative, and positive team member.

CLASS CHARACTERISTICS

This is the advanced journey level classification within the Systems Analyst job series. Incumbents in this job class possess and apply advanced levels of specialized and technical analytical skills and knowledge while serving as team leader/project manager for designated major systems. Incumbents in this job class perform the most difficult and responsible duties including providing advanced technical support to system users. Incumbents in this job class provide lead direction to programming, other Systems Analysts, and/or consultants on assigned systems design and/or maintenance projects. The Systems Analyst job series differs from the Information Technology Specialist job series in that the former performs systems analysis and project management functions requiring a high degree of technical expertise. The Information Technology Specialist job series is responsible for coordinating a variety of computer/data processing functions in support of a single department's user population.

SUPERVISION RECEIVED AND EXERCISED

Receives direction from the Systems and Programming Manager.

Exercises supervision over professional staff.

EXAMPLES OF DUTIES –*Duties may include but are not limited to the following:*

Plans, coordinates, and monitors the work of other systems analysts, programming staff, and/or technical consultants in the planning, design, testing, implementation, and maintenance of large, complex, and multi-functional computerized system(s).

Acts as project manager/team leader in support of large, complex, and multi-functional computerized system(s); assists in preparation of the computer services budget; monitors assigned budget(s) for designated data processing/applications systems as assigned.

Oversees, coordinates, and participates in organizational, operational, and procedural analyses to determine information input, work processes, and desired output for potential and/or up-dated computerization for a large number of users -in support of a multi-departmental or county-wide applications; reviews and analyzes a variety of forms, documents, reports, data output, and

record-keeping requirements.

Oversees, coordinates and installs hardware and software required for county-wide systems.

Installs and administers database and file management software; customizes vendor database software to meet county requirements; provides technical design of databases; monitors performance of databases and corrects problems and/or improves performance.

Maintains operating systems, and environmental and data communications software; monitors performance of hardware and operation system software and corrects problems and/or improves performance; designs back-up and recovery procedures; supports computer operations.

Consults with customer/user departments and advises on the feasibility of converting systems to computerized applications; analyzes departmental and County-wide operations, functions, services, interdepartmental relationships, and the information sharing needs in the development of new and/or up-dated systems and procedures; recommends improvements in operations and administration of existing systems.

Integrates complex and multi-functional' systems for inter-operability over multiple platforms and technologies; designs systems' flowcharts and prepares block diagrams for the over-all applications; coordinates and integrates various phases of the systems from initial stages to completion.

Acts as liaison between and primary resource to vendors, technical support consultants, and departments in the resolution of complex system and networking -problems; initiates, coordinates, and implements appropriate and corrective measures.

Provides on-going guidance and advice to team members, technical and programming staff, and users; assigns work to staff, reviews team members' work on a regular and as needed basis; ensures adherence to Information Services standards and County policies; coordinates appropriate training for team members; monitors productivity and quality of work.

Attends and conducts a variety of planning and project meetings; develops cost, and time estimates; prepares progress/status reports, presentations and other documentation.

Creates test transactions and coordinates testing process to discover errors and confirm programs meet specifications; analyzes code to find causes of errors and revises programs as necessary; monitors performance of programs/systems after implementation on a periodic and on-going basis.

Writes and/or modifies documentation describing program development, logic, coding, testing, changes, and corrections as necessary; develops, coordinates, and/or conducts training of users to ensure systems are applied in an optimum manner.

Maintains professional knowledge in applicable areas and keeps abreast of changes in job-related rules, statutes, laws and new business trends; makes recommendations for the implementation of

changes; reads and interprets professional literature; attends training programs, workshops and seminars as appropriate.

JOB RELATED AND ESSENTIAL QUALIFICATIONS

Knowledge of:

Standard and accepted principles and methodologies of computer programming and logic.

Standard and accepted principles, methods, and techniques of systems analysis, design and implementation.

Capabilities and potential uses of large scale computers and complex, multifunctional software applications.

Interrelationships of computer hardware and software, Local Area Networks (LAN), Wide Area Networks (WAN), and other information technology equipment.

Database structures, database design, applications programming, distributed processing, end-user computing, database query software and on-line programming software.

Computer programming languages and techniques.

Design and workflow principles.

Applications, programming, coding and testing.

Data organization and access methods in computerized systems.

Data base management systems, data communications and, on-line and interactive systems.

Methods of estimating/cost analysis.

Budget development and tracking methods and techniques; standard and accepted bidding and procurement methods and techniques.

Working Knowledge of principles of governmental accounting and fiscal systems.

Supervisory and motivational standards and guidelines.

Business and governmental record-keeping and procedures.

Skill to:

Operate office equipment including a personal computer, copy and fax machines and printers.

Ability to:

Learn and understand designated systems, processes, and operations in relation to users' goals, needs, and priorities.

Prepare feasibility and needs' studies/surveys and narrative and statistical reports.

Research regulations, procedures, and/or technical reference materials.

Perform responsible project management, establish realistic project schedules and controls utilizing one or more of the several charting and scheduling techniques available.

Perform a variety of complex and multi-functional technical and specialized tasks and functions in an independent, competent, and timely manner.

Collect and analyze data to identify needs and/or problems; evaluate system effectiveness; research and analyze alternative solutions.

Coordinate, evaluate, and motivate assigned staff in a positive and effective manner.

Operate a variety of usual and specialized software programs to include word processing, spreadsheets, and specialized databases at a level sufficient for successful job performance.

EXPERIENCE AND EDUCATION/TRAINING

Experience and Education:

Two years of experience performing progressively responsible journey level systems analysis work AND a Bachelor's degree is required from an accredited college or university in information technology, management information systems, or a closely related field

OR

Five years of experience performing progressively responsible programming duties and functions to include at least two years of responsible systems analysis AND equivalent to an Associate's degree in information technology, management information systems, or closely related field **OR** one hundred twenty hours of designated coursework and/or certification training.

SPECIAL REQUIREMENTS

Possession of, or ability to obtain, a valid Class C California driver's license may be required of designated positions.

SUPPLEMENTAL INFORMATION

Independent travel is required.

Incumbents are required to work outside normal business hours including nights, week-ends, holidays, and on an emergency basis, as needed.

Candidates for positions in this classification will be required to pass a background investigation in accordance with applicable law regulation, and/or policy.

ADA COMPLIANCE

Physical Ability: Tasks involve the ability to exert light physical effort in sedentary to light work, but which may involve some lifting, carrying, pushing and/or pulling of objects and materials of light weight (5-10 pounds). Tasks may involve extended periods of time at a keyboard or workstation.

Sensory Requirements: Requires the ability to recognize and identify similarities and differences between shade, degree or value of colors, shapes, sounds, forms, textures or physical appearance associated with job-related objects, materials, tasks or people.

Environmental Factors: Requires the ability to work under conditions where exposure to environmental factors poses a limited risk of minor injury or illness.

Director of Human Resources

Established Date: September 2001

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BOS Date: June 30, 2003