PRINCIPAL INFORMATION TECHNOLOGY ANALYST

This class specification indicates, in general terms, the type and level of work performed as well as the responsibilities of employees in this classification. The job functions described are not to be interpreted as being all-inclusive to any specific employee.

DEFINITION

Under general direction, provides the highest level of professional computer and related systems support, including conducting comprehensive and complex systems design, analysis, and development; assumes responsibility for developing, directing, and ensuring operational availability, performance, and security of the District's most complex and strategic operations; serves as a project manager on assigned projects; serves as Business Analyst for assigned departments; provides guidance to other Information Technology staff as necessary; and performs related work as required.

SUPERVISION RECEIVED AND EXERCISED

Receives general direction from assigned supervisory and/or management staff. Exercises no direct supervision of staff. May exercise functional and technical leadership in assigned workgroups or teams and coach and/or mentor less experienced staff.

CLASS CHARACTERISTICS

This is the advanced-journey, lead-level class in the professional Information Technology Analyst series responsible for the maintenance, modification, process customization, training, and report development for mission critical, enterprise-wide system(s). Employees perform the most difficult and most highly complex assignments, projects, analyses, and programs assigned to classes within this series requiring highly advanced and specialized knowledge of the concepts, practices, procedures, and policies of the assigned functions. Employees at this level are required to be subject matter experts in all aspects related to assigned area of responsibility and provide leadership to less experienced staff. Responsibilities may include the oversight of programs and/or projects and leads by example. This class is distinguished from the Information Technology Supervisor in that the latter is responsible for planning, organizing, and coordinating the programs, projects, and activities of a major work section and/or several functional areas within the Information Technology division and for the full supervision of assigned professional, technical, and administrative support staff.

EXAMPLES OF ESSENTIAL JOB FUNCTIONS (Illustrative Only)

Management reserves the right to add, modify, change, or rescind the work assignments of different positions and to make reasonable accommodations so that qualified employees can perform the essential functions of the job.

➢ Assumes responsibility for developing, directing, and ensuring operational availability, performance, and security of the District's most complex and strategic systems and operations.

➢ Performs comprehensive systems analysis to design and develop new systems and enhancements to current systems; consults, confers, and coordinates activities with users, staff from various departments, outside agencies, and vendors to resolve program, system, operational, and procedural problems; analyzes problems and recommends corrective action.

➢ Plans, develops, and analyzes additions, changes, and enhancements to computer system software; researches, evaluates, installs, and implements new versions and releases for integration into existing systems; determines impact on existing District systems and applications; troubleshoots, analyzes, and resolves hardware and software related problems; coordinates and documents testing procedures.

➢ Installs and maintains new and upgraded software for database management systems; establishes procedures for database operation, control, and recovery.

➢ Ensures database availability to system users; provides, controls, grants, and revokes user access; develops standards and strategies for maintaining database security and integrity; monitors users to ensure compliance with operational and security procedures; performs database management duties; provides support to information technology staff in planning, designing, and implementing highly complex databases; designs, creates, maintains, and modifies database structure, tables, files, views and indexes; manages database and file space allocation; makes recommendations on strategies to meet future storage requirements.

➢ Develops and administers strategies, policies, and procedures for network availability and security; designs and implements firewall strategies to ensure District data security and integrity.

➢ Serves as technical advisor in assigned systems area; provides and/or recommends solutions to other staff on a variety of technical problems.

➢ Serves as project manager on information systems projects; analyzes client information system needs; recommends solutions and appropriate technology to meet client needs; designs project and resource plans and schedules; develops proposals using cost/benefit analyses; evaluates proposed system hardware and software to ensure compatibility with existing systems; oversees the installation and evaluation of software and hardware; controls, monitors, and reports budget expenditures; directs members of the project team; provides written reports and presentations on project status.

➢ Performs technical writing duties in the development and production of highly complex system documentation, instructional, and procedural manuals.

➢ Attends and participates in professional group meetings; stays abreast of new trends and innovations in the field of information technology.

➢ When assigned to programs and/or projects, provides leadership and guidance to others. As a program and/or project leader, may direct, assign, train, monitor and review the work activities of team members; determines work priorities; oversees quality and quantity of work performed and ensures adherence to established procedures by instructing employees accordingly; is a reference to employees by possessing specialized skills; develops and implements work improvements.

➢ Performs related duties as required.

QUALIFICATIONS

Knowledge of:
➢ Operations, services, and activities of a comprehensive information systems program.
➢ Highly complex principles, practices, and methods of system design, development, analysis, testing and security administration.
➢ Advanced principles and applications of critical thinking and analysis.
➢ Advanced methods and techniques of evaluating business requirements and developing information systems solutions for strategic District systems.
➢ Advanced principles and practices of project management.
➢ Advanced principles and practices of programming languages, job control languages, and executive control command.
➢ Advanced principles and practices of system software and hardware installation and troubleshooting.
➢ Functional structure of various operating system components, including system control programs and data access methods.
➢ Advanced concepts, principles, and practices of wide area network design, development, protocols, security, and administration.
➢ Operations, services, and activities of a comprehensive database administration program.

➢ Advanced programming techniques including integrated database management applications.
➢ Advanced methods and techniques of developing data security, integrity, backup, and recovery processes.
➢ Advanced principles of database design, administration, management and integrity.
➢ Principles and concepts of data planning, modeling, design and storage.
➢ Operational characteristics of database support tools, servers and communication devices.
➢ Principles of cross-functional business processes.
➢ Advanced methods and techniques of installing and maintaining network devices including switches, routers, and hubs.
➢ Methods and techniques of developing complex application technical user manuals and documentation.
➢ Recent and on-going developments, current literature, and sources of information related to the operations of the assigned programs.
➢ Applicable Federal, State, and local laws, regulatory codes, ordinances, and procedures relevant to assigned area of responsibility.
➢ English usage, grammar, spelling, vocabulary, and punctuation.
➢ Basic principles and practices of employee supervision.
➢ Techniques for effectively representing the District in contacts with governmental agencies, community groups, and various business, professional, educational, regulatory, and legislative organizations.
➢ Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and District staff.

Ability to:
➢ Plan, schedule, assign, and oversee activities of assigned workgroups or teams.
➢ Oversee programs and/or projects and by example promote the individual professional growth and development of less experienced staff.
➢ Resolve conflict through workable solutions and alternative approaches.
➢ Inspect the work of others and maintain established quality control standards.
➢ Train others on proper work procedures and lead by example.
➢ Demonstrate safe work practices and procedures in the workplace.
➢ Apply critical thinking and analysis to a broad range of situations.
➢ Identify and implement effective course of action to complete assigned work.
➢ Use critical thinking techniques and advanced methods in reaching independent decisions.
➢ Identify problems, research and analyze relevant information, develop and present recommendations and justification for solution.
➢ Perform the most complex professional work in support of the information systems of the District.
➢ Interpret, apply, explain, and ensure compliance with Federal, State, and local policies, procedures, laws, rules, and regulations.
➢ Maintain confidentiality and be discreet in handling and processing confidential information and data.
➢ Direct and coordinate technical operations and services in assigned systems area.
➢ Serve as technical advisor in assigned systems area.
➢ Analyze department procedures and data to develop logical solutions to complex systems problems.
➢ Recommend, evaluate, design, develop, test, and install complex operating systems, applications and supporting hardware and software.
➢ Plan, develop, establish, monitor and maintain system security strategies in assigned systems area.
➢ Provide advanced-level technical support for the implementation and maintenance of computer software systems.
➢ Perform operational functions on computer systems.
➢ Plan and oversee quality assurance and security procedures for database, and network systems.
➢ Troubleshoot and analyze complex local and wide area network operating, hardware and software problems.

➢ Develop strategies to accommodate future data storage needs.
➢ Evaluate database needs and develop database models to meet District information technology needs.
➢ Research and monitor technical trends.
➢ Establish and maintain a variety of filing, record-keeping, and tracking systems.
➢ Operate office equipment including computers and supporting word processing, spreadsheet, and database applications.
➢ Organize and prioritize a variety of projects and multiple tasks in an effective and timely manner; organize own work, set priorities, and meet critical time deadlines.
➢ Use English effectively to communicate in person, over the telephone, and in writing.
➢ Use tact, initiative, prudence, and independent judgment within general policy and legal guidelines.
➢ Establish, maintain, and foster positive and harmonious working relationships with those contacted in the course of work.

Employment Standards:
Any combination of education and experience that provides the required knowledge, skills, and abilities may be qualifying as determined by OCSD.

1. Possession of a bachelor's degree from a college or university which is accredited by the US Department of Education, with major coursework in computer science, information systems, or a related field; AND,
2. Eight (8) years of increasingly responsible experience in information systems or network programming and analysis.

Licenses and Certifications:
➢ Possession of, or ability to obtain, a valid California Driver's License by time of appointment.
➢ Possession of information technology industry recognized certifications are desirable.

Disaster Service Workers:
All Orange County Sanitation District employees are designated Disaster Service Workers through state law (California Government Code Section 3100-3109). Employment with the Orange County Sanitation District requires the affirmation of a loyalty oath to this effect. Employees are required to complete all related training as assigned, and to return to work as ordered in the event of an emergency.

PHYSICAL DEMANDS

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer; to operate a motor vehicle and to visit various District and meeting sites; vision to read printed materials and a computer screen; and hearing and speech to communicate in person, before groups, and over the telephone. This is primarily a sedentary office classification although standing in and walking between work areas may be required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment. Positions in this classification occasionally bend, stoop, kneel, reach, push, and pull drawers open and closed to retrieve and file information. Employees must possess the ability to lift, carry, push, and pull materials and objects weighing up to 25 pounds.

ENVIRONMENTAL ELEMENTS

Employees work in an office environment with moderate noise levels, controlled temperature conditions, and no direct exposure to hazardous physical substances. Employees may interact with upset staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures.