

INFORMATION TECHNOLOGY SPECIALIST

Series Specification

Information Technology Specialist I

Information Technology Specialist II

Senior Information Technology Specialist

DEFINITION

This series specification describes three classes that have responsibility for a variety of technical support duties in the organization. Duties could include computer or network installation and support; applications development and maintenance; or Help Desk support. This class is characterized by technical performance in broad, heterogeneous and/or complex areas; or a greater degree of system and/or organizational accountability. The following specialty fields exist in this series:

- Microcomputer Support
- Network Support
- Help Desk Support
- Institutional Research
- Configuration Management
- Audio/Video Media Support

DISTINGUISHING CHARACTERISTICS

Microcomputer Support

Information Technology Specialist I: This is an experienced technician. Under general supervision, incumbents perform specific technical, complex support duties.

Information Technology Specialist II: This is an experienced Information Technology Specialist I or equivalent who has broad levels of responsibility, works in more complex system environments, works with multiple PC platforms and operating systems, or is primarily responsible for a major technical area. Incumbent performs duties with minimal supervision.

Senior Information Technology Specialist: This is the lead position in this class. Incumbents may function as team leaders and/or technical specialists. This position is distinguished from Information Technology Specialist levels I and II by the amount of responsibility, leadership and discretion exercised, expertise demonstrated, and complexity and scope of work performed.

Network Support

Information Technology Specialist I: This is an experienced technician. Under general supervision, incumbents perform specific technical, complex support duties.

Information Technology Specialist II: This is an experienced Information Technology Specialist I or equivalent who has broad levels of responsibility, works in more complex system environments or is primarily responsible for a major technical area. The incumbent performs duties with minimal supervision.

Senior Information Technology Specialist: This is the lead position in this class. Incumbents may function as team leaders and/or technical specialists. This position is distinguished from Information Technology Specialist I and II by the amount of responsibility, leadership, and discretion exercised, expertise demonstrated, and complexity and scope of work performed.

Help Desk Support

Information Technology Specialist I: This is an experienced technician. Under general supervision, incumbents perform specific technical, complex duties.

Information Technology Specialist II: This is an experienced Information Technology Specialist I or equivalent who has broad levels of responsibility, works in more complex system environments or is primarily responsible for a major technical area. The incumbent performs duties with minimal supervision.

Senior Information Technology Specialist: This is the lead position in this class. Incumbents may function as team leaders and/or technical specialists. This position is distinguished from Information Technology Specialist levels I and II by the amount of responsibility, leadership, and discretion exercised, expertise demonstrated, and complexity and scope of work performed.

Institutional Research

Information Technology Specialist I: This is an experienced technician. Incumbent has primary responsibility for the technical support of Institutional Research at the College-wide or District-wide level. Responsibilities include the following technical areas: IR computer systems; IR database management systems; program/project tracking systems; and Website.

Information Technology Specialist II: This is an experienced Information Technology Specialist I, or equivalent who has primary responsibility for Institutional Research and is distinguished from the Information Technology Specialist I – Institutional Research by the complexity and scope of work performed. Responsibilities include the following technical areas: IR computer systems; the IR network; IR database management systems including the data warehouse for research reporting; organization-wide student tracking systems; and the IR FTP and Web servers.

Senior Information Technology Specialist: This is an experienced Information Technology Specialist who performs the most complex activities within the scope of the Information Technology (IT) organization. Incumbent typically has primary responsibility for Institutional Research at the organization-wide level and has lead responsibilities in the following technical areas: IR computer systems; the IR network; IR database management systems including the data warehouse for research reporting; organization-wide student tracking systems; and the IR FTP and Web servers.

Configuration Management

Information Technology Specialist I: This is an experienced technician. Under general supervision, incumbents perform specific technical, complex duties.

Information Technology Specialist II: This is an experienced Information Technology Specialist I or equivalent who has broad levels of responsibility, works in more complex system environments or is primarily responsible for a major technical area. The incumbent performs duties with minimal supervision.

Senior Information Technology Specialist: This is the lead position in this class. Incumbents may function as team leaders and/or technical specialists. This position is distinguished from Information Technology Specialist levels I and II by the amount of responsibility, leadership, and discretion exercised, expertise demonstrated, and complexity and scope of work performed.

Audio/Video Media Support

Information Technology Specialist I: This is an experienced technician. Under some supervision, incumbents perform a variety of complex technical, operational, and instructional duties.

Information Technology Specialist II: This is an experienced Information Technology Specialist I or equivalent who has broad levels of responsibility, works in more complex system environments, works with multiple computer and media platforms and operating systems. Under minimal supervision, incumbents perform a wide variety of complex technical, operational, and instructional duties.

Senior Information Technology Specialist: This is the lead position in this class. Incumbents may function as team leaders and/or technical specialists. This position is distinguished from Information Technology Specialist levels I and II by the amount of responsibility, leadership, and discretion exercised, expertise demonstrated, and complexity and scope of work performed.

TYPICAL DUTIES

Microcomputer Support

Information Technology Specialist I & II: Determines requirements, installs, configures and maintains desktop operating systems, virtual environments, and application software and hardware in an organization-wide, networked environment. Assists end users with hardware and software applications and/or network usage problems and provides problem resolution; troubleshoots and repairs microcomputers by replacing components and rebuilding and upgrading with new and/or used components; and troubleshoots system problems to provide continued operation through permanent solutions or ways to work around the problems. Serves as technical advisor to college and District staff; assists staff with the planning for new systems or system upgrades; works with college and District Office technicians, specialists, and analysts to maintain college and District-wide systems integrity; and determines necessity and extent of software and hardware upgrades for student use, college staff, administrators, and/or faculty. Develops specifications, descriptions, and operating instructions; performs system analysis on projects of moderate scope; and resolves network connectivity problems on local area network. Manages active directory objects, network shares and network services. Performs first-level problem resolution as assigned by help desk; ensures microcomputers and servers are in compliance with licenses and copyright laws; and researches new technology, evaluates feasibility, and provides draft requisitions for computers and computer related materials. Maintains a depot of spare components for microcomputer repair; surpluses microcomputers and related components; mentors and oversees the work of student assistants and junior technicians; and updates and maintains industry knowledge as related to job functions. Performs related duties as required.

Senior Information Technology Specialist: In addition to the typical duties of Information Technology Specialist I & II; acts as a focal point for requests, problems, and issues affecting the unit; assigns and monitors staff assignments and special projects; and serves as technical advisor to college and/or District staff. Assists in development of installation and maintenance procedures; assists technical staff in solving system problems; and assigns system resources as needed. Leads and participates in projects; leads the planning of migrations to new/improved hardware and software products; leads the development of procedures, policies, and guidelines for the operation of the unit; and leads the planning, design, and maintenance of complex systems. Provides leadership, direction, and training to Information Technology Specialists and contract employees. Provides technical architectural and modification guidelines. Performs related duties as required.

Network Support

Information Technology Specialist I & II: Installs and maintains network components in the organization-wide network. Assists end users with hardware and software applications and/or network usage; troubleshoots system problems to provide continued operation; and serves as technical advisor to college and District staff. Develops specifications, descriptions, and operating instructions. Performs system analysis on projects of moderate scope. Works with campus and District technicians, specialists, and analysts to implement and maintain needed connectivity; resolves network connectivity problems; and maintains network availability, performance, and security. Ensures compliance with license and copyright laws. Researches and evaluates new technology. Performs related duties as required.

Senior Information Technology Specialist: In addition to the typical duties of Information Technology Specialist I & II; acts as a focal point for requests, problems, and issues affecting the unit. Assigns and monitors staff assignments and special projects. Serves as technical advisor to college and District staff. Assists in development of installation and maintenance procedures. Assists technical staff in solving system problems and assigns system resources as needed. Leads and participates in projects; leads the planning of migrations to new/improved hardware and software products; and leads the development of procedures, policies, and guidelines for the operation of the unit. Leads the planning, design, and maintenance of the network infrastructure. Provides leadership, direction and training to Information Specialist and contract employees. Provides technical architectural and modification guidelines. Documents and publishes information relevant to new installations and changes. Performs related duties as required.

Help Desk Support

Information Technology Specialist I & II: Performs first-level, problem resolution; assists end users with hardware, software, applications and/or network usage employing appropriate telephone etiquette; and troubleshoots system problems to provide continued operation. Sets up and deletes accounts; creates logins and passwords for users; and maintains records of assigned accounts. Creates and deletes voicemail accounts and maintains records of assigned voicemail accounts. Monitors network use; tests network services; and troubleshoots problems and coordinates problem resolution with vendors, assisting technicians as needed. Creates and maintains web pages for users (FAQ and set-up guide for new users). Maintains help desk notification system; performs daily system checks; and distributes daily status reports. Serves as technical advisor to college and District staff; participates in the development of specifications, descriptions, and operating instructions. Answers, tracks, and manages problem and service requests from information system users. Coordinates, prioritizes, and transfers problems and requests to technical staff for resolution. Documents and tracks procedures, agreements, and technical materials. Coordinates and communicates system changes with technical staff and IT users. Communicates system status to the District community of IT users. Performs related duties as required.

Senior Information Technology Specialist: In addition to the typical duties of Information Technology Specialist I & II; acts as a focal point for requests, problems and issues affecting the unit. Assigns and monitors staff assignments and special projects. Leads the development of installation and maintenance procedures. Assists technical staff in solving system problems. Assigns system resources as needed. Leads and participates in projects and leads the planning of migrations to new/improved hardware and software products. Leads the development of procedures, policies, and guidelines for the operation of the unit and the planning, design, and maintenance of complex processes. Provides leadership, direction and training to Information Technology Specialists and contract employees. Provides technical architectural and modification guidelines. Leads first-level problem resolution. Monitors network use; tests network services; and troubleshoots problems and coordinates problem resolution with vendors, assisting technicians as needed. Maintains help desk notification system; performs daily system checks; and distributes daily status reports. Serves as technical advisor to college and District staff; leads the development of specifications, descriptions, and operating instructions. Answers, tracks, and manages problem and service requests from information system users. Coordinates, prioritizes, and transfers problems and requests to technical staff for resolution. Documents and monitors procedures, agreements, and technical materials; coordinates and communicates system changes with technical staff and IT users; and communicates system status to the District community of IT users. Performs related duties as required.

Institutional Research

Information Technology Specialist I & II: Plans, designs, implements, evaluates, and supports all IR computer systems, databases, data warehouse, and/or network needs including performance monitoring; plays a key role in the development of policies, procedures, and standards in database management, computer system and/or network system administration for research; and reviews and recommends budget allocations for computer equipment, software, and license agreements for IR operations. Develops and automates complex software applications for research reporting and data analysis; maintains security as well as staff and

organization-wide access to research information and student data; and provides limited on-line access by the public to research information and student data. Maintains backup and recovery policies and procedures for IR systems; provides technical leadership, training, and consulting related to IR system and application use; and diagnoses problems and develops resolutions related to IR applications, Website, computer systems, SQL database and/or the IR network. Provides IR programming support; serves as the lead on technical teams and IR projects related to systems, web, database and/or network administration; and serves as the IR Website administrator and administrator for IR FTP server. Provides technical/software guidance and application support related to completing research projects, reports, and presentations; assists staff in developing student tracking systems; and maintains documentation related to IR database, automated and special applications, IR Website, and for IR system users. Maintains data integrity and assists with data validation; maintains working knowledge of industry information, vendor direction, new products and technical architectures/approaches related to IR technical needs; and maintains a strong working relationship with IT staff to assure access to comprehensive student-based data for use by District and college researchers. Assists in the development of new databases within the data warehouse and/or downloadable files for research purposes; serves as the technical liaison to IT for the use of the PeopleSoft System for research and reporting; and assists with the development of special data extracts from PeopleSoft to build a data warehouse research and reporting. Supports research and database-related software as well as training/consultation to staff across the organization related to these software applications. Performs related duties as required.

Senior Information Technology Specialist: In addition to the typical duties of Information Technology Specialist I & II; plans, designs, implements, evaluates, and supports all IR computer systems, databases, data warehouse, and/or network needs including performance monitoring; serves as the lead in the development of policies, procedures, and standards in database management, computer system and/or network system administration for research; and reviews and recommends budget allocations for computer equipment, software, and license agreements for IR operations. Frequently functions as a project manager; develops and automates complex software applications for research reporting and data analysis; maintains security as well as staff and organization-wide access to research information and student data; and provides limited on-line access by the public to research information and student data. Maintains backup and recovery policies and procedures for IR systems; provides technical leadership, training, and consulting related to IR system and application use; and diagnoses problems and develops resolutions related to IR applications, Website, computer systems, SQL database and/or the IR network. Provides IR programming support; serves as the lead on technical teams and IR projects related to systems, web, database, and/or network administration; and serves as the IR Website administrator and administrator for IR FTP server. Provides technical/software guidance and application support related to completing research projects, reports, and presentations; leads staff in the design and development of student tracking systems; and maintains documentation related to IR database, automated and special applications, IR Website, and for IR system users. Assures data integrity and leads data validation; maintains working knowledge of industry information, vendor direction, new products and technical architectures/approaches related to IR technical needs; and maintains a strong working relationship with IT staff to assure access to comprehensive student-based data for use by District and college researchers. Leads the development of new databases within the data warehouse and/or downloadable files for research purposes; serves as the lead technical liaison to IT for the use of the PeopleSoft System for research and reporting; and develops special data extracts from PeopleSoft to build a comprehensive data warehouse for organization-wide research and reporting. Supports research and database-related software as well as training/consultation to staff across the District related to these software applications. Performs related duties as required.

Configuration Management

Information Technology Specialist I & II: Monitors vendor web sites for new developments, updates, known problem notices, compatibility/certification matrices, and other useful information; downloads vendor software patches and upgrades; maintains documentation for CM, Systems, and Database administration (e.g., instance details, server details, past/future refresh dates, etc.). Coordinates & announces instance refresh dates and related activities (modification migration dates before & after refreshes); migrates software modifications from development to production and quality assurance environments and escalates more complex

modifications to higher level CM staff; checks out/in software to implement version control; runs standard CM processes and audit reports; and syncs application files between servers (e.g., application, batch, and file servers). Uses appropriate software tools as designed (e.g., App Designer, DataMover, Configuration Manager, Change Assistant, in-house built scripts, etc.); maintains configuration files for in-house-built CM tools; and creates and maintains service accounts and configuration passwords. Maintains and coordinates security between Production Services and Application Services Units (e.g., SplashID or other future products); attends Los Rios software development meetings (e.g., Code reviews, Standards meetings, patch/upgrade project meetings); and attends vendor training. In addition the IT Specialist II duties include such tasks as performs refresh tasks (e.g., refreshes files, configures Report Repository, configures REN, configures App Messaging, tests configurations, cycles/clears servers); updates security with existing functions as designed (no changes in role definitions, etc.); and assists IT Analysts (Systems & Database) with application patches/upgrade tasks (migrates files, update security, run standard processes, compile code). Maintains version control databases (e.g., adds/deletes databases, renames files, modifies directories, maintains archives, etc.); manages Los Rios modifications during software upgrade iterations (migrate in/out of QA and resolve conflicts); and maintains documentation for cutover, maintains separate production and project PVCS repositories, migrates modifications on cutover weekends, runs scripts, and adjusts configurations as needed for new release (application or middle-ware layers).

Senior Information Technology Specialist: In addition to the typical duties of Information Technology Specialist I & II; maintains assigned components of software security and analyze/resolve problems; migrates *more complex* software modifications from development to production and quality assurance environments (possibly escalated from lower levels); and analyzes and resolves problems with more complex software modifications, using knowledge of DB access tools, PeopleBooks, My Oracle Support. Assists application developers (IT Analysts and IT Specialists) with patch and upgrade issues; creates and enhances in-house scripts for monitoring CM functions, using Shell, Perl, server tasks, etc.; Analyzes and resolves daily audit exceptions and CM process exceptions in production environment. As backup to IT Analysts (Systems & Database), restarts and clears cache for web, app, & batch servers; and implements routine vendor software patches and detects conflicts with Los Rios modifications for escalation to developer.

Audio/Video Media Support

Information Technology Specialist I & II: Provides audio/video (A/V) support for internal and external events as necessary. Assists faculty, staff, and administrators with audio/video-related questions and problems. Transports sets up, maintains, monitors, and troubleshoots teleconferencing equipment, multimedia devices, televisions, monitors, projectors, recording equipment, speaker sets, digital cameras/camcorders, audio mixers, sound boards and other presentation equipment. Performs maintenance and repairs on media systems equipment and software. Assists staff with telecommunications network scheduling and programming; monitors automated network switching equipment; and coordinates the scheduling of distance education facility sites. Installs equipment for multimedia classrooms; provide multimedia hardware/software and streaming expertise and production support. Assists with digital program production, satellite teleconferences, and digital videoconferences. Duplicates audio, video, and other media programs from original materials. Receives, inspects, tests, and labels all new equipment; maintains inventory records and files. Acts as a focal point for requests, problems and issues affecting the unit. Evaluates and recommends equipment for potential purchase. Provides technical architectural position summary and modification guidelines. Evaluates status of existing systems and facilities and manages systematic testing and preventative maintenance processes to keep both permanently installed and portable equipment in working order to meet customer needs. Gathers bids from appropriate vendors, evaluates options, and make recommendations. Participates in the development of procedures, policies, and guidelines for the operation of the department. Monitors budgets; forecasts employment costs for student assistants; and requisitions supplies and equipment within budget allocations as required. Completes return merchandise authorization forms for vendors as appropriate. manage campus-wide systems and facilities to keep learning spaces, meeting rooms, production facilities, and event spaces in optimal working order. Designs, builds, operates, and maintains media systems, transmission equipment, and pathways; interactive television classrooms, control rooms, and distribution channels; and field production equipment. Provides input, advice and feedback on the suitability, sustainability and use of new products and

processes. Provides technical guidelines on major projects related to field of expertise. Maintains all required communications licenses and directs the research, planning, and implementation of migration from analog to digital technologies. Meet with customers, colleagues and vendors to create scopes of work, resource requirements, and implementation/installation timelines. Serves as technical advisor to college and District staff; assists staff with the planning for new media systems or system upgrades; works with college and District Office technicians, specialists, and analysts to maintain college and District-wide systems integrity; and determines necessity and extent of media software and hardware upgrades for student use, college staff, administrators, and/or faculty. Manages a variety of AV/IP projects; oversees/participates in the installation of the project, tests and commissions the project to make sure it meets the scope of work details and trains the end users on the system. Oversees production of and produces campus-wide and departmental video or photographic communication projects related to service, product, or event promotion, training, announcements, marketing, and other informational communication messages (includes pre-production, production - location and studio filming, and post-production editing, graphic design, marketing, and distribution). Develops specifications, descriptions, and operating instructions; performs system analysis on projects of moderate scope; and resolves media network connectivity problems on local area network. Researches new technology, evaluates feasibility, and provides draft requisitions for media technology and related materials. Updates and maintains industry knowledge as related to job functions. Performs related duties as required.

Senior Information Technology Specialist: In addition to the typical duties of Information Technology Specialist I & II; assigns system resources, assigns and monitors staff assignments, and special projects. Provides leadership, direction and training to Information Technology Specialists and contract employees. Provides technical architectural and modification guidelines. Assists technical staff in solving system problems and assigns system resources as needed. Leads and participates in projects; leads the planning of migrations to new/improved hardware and software products; and leads the development of procedures, policies, and guidelines for the operation of the unit. Leads the planning, design, and maintenance of the media network infrastructure. Documents and publishes information relevant to new installations and changes. Performs related duties as required.

QUALIFICATIONS

EDUCATION/EXPERIENCE

Information Technology Specialist I: An Associate degree in computer science or closely related field (or completion of an equivalent certificate program) and three years experience directly related to job duties; OR, a combination of training and/or four years experience with related job duties likely to have provided the required level of knowledge and abilities.

Information Technology Specialist II: An Associate degree in computer science or closely related field (or completion of an equivalent certificate program) and two years in class of Information Technology Specialist I; OR, an Associate degree in computer science or closely related field (or completion of an equivalent certificate program) and four years experience directly related to job duties; OR, a combination of training and/or experience totaling six years that is likely to have provided the required level of knowledge and abilities.

Senior Information Technology Specialist: An Associate degree in computer science or closely related field (or completion of an equivalent certificate program) and two years in class of Information Technology Specialist II; OR, an Associate degree in computer science or closely related field (or completion of an equivalent certificate program) and five years experience directly related to job duties; OR, a combination of training and/or experience totaling eight years that is likely to have provided the required level of knowledge and abilities.

SPECIAL REQUIREMENT

IT Specialist I/II and Senior Information Technology Specialist - Microcomputer Support;
IT Specialist I/II and Senior Information Technology Specialist - Network Support; and
IT Specialist I/II and Senior Information Technology Specialist - Audio/Video Media Support:
Any offer of employment will be contingent upon the successful completion of a medical evaluation.

IT Specialist I/II and Senior Information Technology Specialist - Audio/Video Media Support: Possess and maintain a valid California Driver's License in compliance with Los Rios Board Regulation R-8343; employment is contingent upon meeting the requirements of Los Rios Board Regulation R-8343.

KNOWLEDGE OF

Microcomputer Support

Information Technology Specialist I, II and Senior Information Technology Specialist: Knowledge of a variety of computer operating systems (MAC, Windows, Linux, etc.); computer hardware, telecommunications, and network systems; business recovery (disaster recovery); system, user, and architecture documentation; and effective customer service. Knowledge of installation of microcomputers and technical problem solving in a networked environment; microcomputer support functions; microcomputer operating system internals, commands, operations, and utilities; and system maintenance, diagnostic procedures, and techniques. Knowledge of current industry information, vendor direction, new products, and new technical architectures; software licensing, intellectual property rights, and copyright law; software systems development life cycle; and local area networking, protocols and Internet computing technologies. Knowledge of effective communication techniques; project terminology and practices; team dynamics and workgroup interaction; and information system problem management and change management. Knowledge of concepts of asset management; configuration and support of microcomputer peripheral equipment; microcomputer applications and utilities, such as word processing, spreadsheets, database, anti-virus policy control, and Internet applications; and desktop, application, and network security technologies, procedures and practices. Knowledge of VOIP technologies, Wi-Fi technology, BYOD systems, and virtual systems technology.

Senior Information Technology Specialist: Knowledge of the structure and function of a variety of computer operating systems (MAC, Windows, Linux, etc.). Knowledge of effective leadership and project management; organizational processes, practices, and policies; business system applications; and methods of long-term technology assessment and deployment. Knowledge of enterprise distributed computer system technologies; relevant telecommunication standards; microcomputer hardware architecture on multiple platforms; and microcomputer network interfacing and troubleshooting.

Network Support

Information Technology Specialist I, II and Senior Information Technology Specialist: Knowledge of computer operating systems, hardware, telecommunications, and network systems; system, user, and architecture documentation; business recovery (disaster recovery); and technical problem solving. Knowledge of effective customer service and communication techniques; team dynamics and workgroup interaction; and project terminology and practices. Knowledge of current industry information, vendor direction, new products, and new technical architectures; software licensing, intellectual property rights, and copyright law; and software systems development life cycle. Knowledge of local area networking and Internet computing technologies; information system problem management and change management; and concepts of asset management. Knowledge of network support functions; of data and/or voice communication concepts and principles; and logical and physical network design. Knowledge of Internet architectures and technologies; network security concepts, principles, and practices; and network configuration, maintenance, and diagnostic procedures and techniques.

Senior Information Technology Specialist: Knowledge of systems design and analysis; networking technologies; user acceptance testing; team building; methods of effective leadership and project management; and service level agreements. Knowledge of organizational processes, practices, and policies. Knowledge of business system applications; methods of long-term technology assessment and deployment; and network support functions. Structured system testing techniques; and complex SQL- compliant coding techniques using multiple joins and nested subqueries. Knowledge of Layer 2 and 3 switching; relevant networking protocols; routing protocols; and engineering practices and principles related to network systems. Knowledge of FCC Rules and Regulations applicable to network equipment and service; and architectural standards related to IT infrastructure installation and impact on related fields such as electrical considerations, space utilization, and teaching efficiency.

Help Desk Support

Information Technology Specialist I, II and Senior Information Technology Specialist: Knowledge of computer operating systems, hardware, telecommunications and network systems; operation of automated problem management systems; and user relations concepts, techniques, and practices. Knowledge of effective customer service; effective communication techniques; team dynamics and workgroup interaction; information system problem management and change management; and project terminology and practices. Knowledge of system, user, and architecture documentation; business recovery (disaster recovery); and technical problem solving. Knowledge of current industry information, vendor direction, new products and new technical architectures; software licensing, intellectual property rights and copyright law; and software systems development life cycle. Knowledge of local area networking and Internet computing technologies; concepts of asset management; and help desk support functions. Knowledge of data and voice communication concepts and principles; Internet architectures and technologies; and network configuration and diagnostic procedures and techniques. Knowledge of common computer applications and utilities, such as word processing, spreadsheets, database, anti-virus, policy control and Internet applications; microcomputer system maintenance and diagnostic procedures; and concepts of configuration and support of microcomputer peripheral equipment. Knowledge of VOIP technologies, Wi-Fi technology, BYOD systems, and virtual systems technology.

Senior Information Technology Specialist: Knowledge of effective leadership and project management; organizational processes, practices and policies; and business system applications. Knowledge of methods of long-term technology assessment and deployment; network support functions including data and/or voice communication; and help desk support functions. Knowledge of diagnostic procedures; operation of automated problem management systems; user relations concepts, techniques, and practices; and operating principles and methods of an enterprise computing system. Knowledge of customization and administration of automated Problem Management systems; concepts and practices of monitoring and administering Service Level Agreements; and automated reporting tools.

Institutional Research

Information Technology Specialist I, II and Senior Information Technology Specialist: Knowledge of personal computer hardware and software systems used in an institutional research environment; programming languages; operating systems; and SQL server. Knowledge of database reporting software; communications software for remote computing; and familiarity with statistical research computer applications and scanning software used in institution research. Knowledge and basic understanding of LANs/WANs, data modeling and transferring data to any RDBMS; and UNIX operating systems and Oracle database systems environment.

Senior Information Technology Specialist: Knowledge of the structure and function of a variety of computer operating systems (MAC, Windows, Linux, etc.). Knowledge of effective leadership and project management; organizational processes, practices and policies. Knowledge and advanced understanding of LANs/WANs, data modeling and transferring data to any RDBMS; and UNIX operating systems and Oracle database systems environment.

Configuration Management

Information Technology Specialist I, II, & Senior Information Technology Specialist:

Knowledge of computer operating systems, hardware, and network systems; operation of automated problem management systems; and user relations concepts, techniques, and practices. Knowledge of effective customer service; effective communication techniques; team dynamics and workgroup interaction; information system problem management and change management; and project terminology and practices. Knowledge of system, user, and architecture documentation; business recovery (disaster recovery); and technical problem solving. Knowledge of current industry information, vendor direction, new products and new technical architectures; software licensing, intellectual property rights and copyright law; and software systems development life cycle. Knowledge of local area networking and Internet computing technologies; concepts of asset management; and application configuration management support functions. Knowledge of common computer applications and utilities, such as word processing, spreadsheets, database, anti-virus, policy control and Internet applications.

Senior Information Technology Specialist:

Knowledge of effective leadership and project management; organizational processes, practices and policies; and business system applications. Knowledge of methods of long-term technology assessment and deployment and configuration management support functions. Knowledge of operation of automated problem management systems; user relations concepts, techniques, and practices; and operating principles and methods of an enterprise computing system. Knowledge of customization and administration of automated Problem Management systems; concepts and practices of monitoring and administering Service Level Agreements; and automated reporting tools.

Audio/Video Media Support

Information Technology Specialist I, II and Senior Information Technology Specialist: Knowledge of audio production and delivery and/or receiving standards, practices, and techniques; and technical problem solving techniques. Knowledge of organizational processes, practices, and policies; instructional delivery methods and techniques; effective communications technique. Knowledge of computer applications including word processing, E-mail, spreadsheets, databases, and Internet applications; graphics and video editing software; technical knowledge of teleconferencing, presentation, and other A/V hardware. Knowledge of principles and practices of electrical and electronic theory needed to maintain and operate a large audio/visual equipment inventory; and sources of new parts and repair items. Knowledge of effective leadership and project management techniques; organizational processes, practices, and policies; instructional delivery and computer system support; basic record keeping and network operating systems; network security technologies, procedures and practices. Knowledge of design, implementation, and support of various media systems. Knowledge of uses for, and operational/technical characteristics of media technologies and equipment, including audio visual, video, computers, and computer projection equipment and its use in learning spaces, classroom capture, streaming media technologies, telecommunications systems and compressed video technology, internet technologies, TCP/IP tools, SHFTP, and Remote Desktop, videoconferencing – both traditional ISDN analog and IP based, multimedia and digital video production and equipment, video – both analog and digital – and editing systems, and audio systems. Knowledge of electronic principles, practices, and techniques involved in all aspects of television from basic electronics through Ultra High-Frequency digital transmitters and receivers including standard analog and digital broadcast operating systems, microwave transmission systems, fiber optic systems, broadband cable systems, satellite earth stations, and instructional television fixed service. Knowledge of production and post-production facility requirements and systems; field production requirements and techniques; and industry standards. Knowledge of future industry directions in the development of new products; copyright law; technical problem-solving techniques; and multimedia production techniques. Knowledge of videotape life cycle and long-term archiving of videotape. Knowledge of audio and video editing requirements and techniques; effective leadership and project management techniques; and effective customer relations. Knowledge of the structure and function of a variety of computer operating systems (MAC, Windows, Linux, etc.). Knowledge of enterprise distributed computer system technologies; relevant telecommunication standards; microcomputer hardware architecture on multiple

platforms; and microcomputer network interfacing and troubleshooting.

SKILLS IN

Microcomputer Support

Information Technology Specialist I, II and Senior Information Technology Specialist: Skill in controlling the operations of equipment or systems; determining the kind of tools and equipment needed to do a job; identifying the nature of problems; and reorganizing information to get a better approach to problems or tasks. Skill in developing an image of how a system should work under ideal conditions; using logic and analysis to identify the strengths and weaknesses of different approaches; and determining the long-term outcomes of a change in operations. Skill in understanding written sentences and paragraphs in work related documents; communicating effectively with others orally and in writing as indicated by the needs of the audience; and listening to what other people are saying and asking questions as appropriate.

Network Support

Information Technology Specialist I, II and Senior Information Technology Specialist: Skill in controlling the operations of equipment or systems; determining the kind of tools and equipment needed to do a job; identifying the nature of problems; and reorganizing information to get a better approach to problems or tasks. Skill in developing an image of how a system should work under ideal conditions; using logic and analysis to identify the strengths and weaknesses of different approaches; and determining the long-term outcomes of a change in operations. Skill in understanding written sentences and paragraphs in work related documents; understanding architectural drawings and schematics; communicating effectively with others orally and in writing as indicated by the needs of the audience; and listening to what other people are saying and asking questions as appropriate.

Help Desk Support

Information Technology Specialist I, II and Senior Information Technology Specialist: Skill in identifying the nature of problems; generating a number of different approaches to problems; reorganizing information to get a better approach to problems or tasks; and developing an image of how a system should work under ideal conditions. Skill in understanding written sentences and paragraphs in work related documents; communicating effectively with others orally and in writing as indicated by the needs of the audience; and listening to what other people are saying and asking questions as appropriate. Skill in controlling the operations of equipment or systems; determining the kind of tools and equipment needed to do a job; skill in using logic and analysis to identify the strengths and weaknesses of different approaches; and determining the long-term outcomes of a change in operations.

Institutional Research

Information Technology Specialist I, II and Senior Information Technology Specialist: Skill in developing an image of how a system should work under ideal conditions; generating a number of different approaches to problems; determining the long-term outcomes of a change in operations; reorganizing information to get a better approach to problems or tasks; and evaluating the likely success of an idea in relation to the demands of the situation. Skill in understanding written sentences and paragraphs in work related documents; communicating effectively with others orally and in writing as indicated by the needs of the audience; finding ways to structure or classify multiple pieces of information; and listening to what other people are saying and asking questions as appropriate.

Configuration Management

Information Technology Specialist I, II, and Senior Information Technology Specialist: Skill in developing an image of how a system should work under ideal conditions; generating a number of different approaches to problems; determining the long-term outcomes of a change in operations; reorganizing information to get a better approach to problems or tasks; and evaluating the likely success of an idea in relation to the demands of the situation. Skill in understanding written sentences and paragraphs in work related documents; communicating effectively with others orally and in writing as indicated by the needs of the audience; finding ways to structure or classify multiple pieces of information; and listening to what other people are saying and asking questions as appropriate.

Audio/Video Media Support

Information Technology Specialist I, II and Senior Information Technology Specialist: Skill in controlling the operations of equipment or systems; determining the kind of tools and equipment needed to do a job; identifying the nature of problems; and reorganizing information to get a better approach to problems or tasks. Skill in developing an image of how a system should work under ideal conditions; using logic and analysis to identify the strengths and weaknesses of different approaches; and determining the long-term outcomes of a change in operations. Skill in understanding written sentences and paragraphs in work related documents; understanding architectural drawings and schematics; communicating effectively with others orally and in writing as indicated by the needs of the audience; and listening to what other people are saying and asking questions as appropriate.

ABILITY TO (ESSENTIAL FUNCTIONS)

Microcomputer Support

Information Technology Specialist I, II and Senior Information Technology Specialist: The ability to perform the Specialist I and Specialist II functions of the position; sustain regular work attendance; work cooperatively and effectively with users, students, staff, peers, and management; exercise initiative and mature judgment; work as a member of a team; and develop and meet schedules and time lines. The ability to learn and adapt to new technologies, procedures and policies; work independently with minimum supervision; and plan, organize, prioritize, and complete the workload of assigned areas of responsibility. The ability to perform individual research, analysis, and evaluation of systems and programs; develop and present technical briefings and specifications; and develop, coordinate, and enforce organization-wide information systems standards. The ability to collect and analyze data utilizing computer applications as appropriate; and integrate multiple PC platforms on a network and allow information sharing between/among platforms.

Senior Information Technology Specialist: The ability to perform the functions of the position. The ability to understand and explain complex procedures and instructions; learn and lead implementation efforts related to new technologies, procedures and policies; and plan, organize, and direct work and assignments. The ability to provide team leadership and direction; prioritize and coordinate activities with vendors, users, and staff and work independently with minimum supervision. The ability to perform individual research, analysis, and evaluation of systems and programs; develop and present technical briefings and specifications; develop, coordinate, and enforce organization-wide information systems standards; collect and analyze data utilizing computer applications as appropriate.

Network Support

Information Technology Specialist I, II and Senior Information Technology Specialist: The ability to perform the Specialist I and Specialist II functions of the position; sustain regular work attendance; work cooperatively and effectively with users, students, staff, peers, and management; exercise initiative and mature judgment; work as a member of a team; and develop and meet schedules and time lines. The ability to learn and adapt to new technologies, procedures and policies; work independently with minimum supervision; and plan, organize, prioritize, and complete the workload of assigned areas of responsibility. The ability to perform individual research, analysis, and evaluation of systems and programs; develop and present technical briefings and specifications; and develop, coordinate, and enforce organization-wide information systems standards.

Senior Information Technology Specialist: The ability to perform the functions of the position. The ability to understand and explain complex procedures and instructions; learn and lead implementation efforts related to new technologies, procedures and policies; and plan, organize, and direct work and assignments. The ability to provide team leadership and direction; prioritize and coordinate activities with vendors, users, and staff; and work independently with minimum supervision. The ability to collect and analyze data utilizing computer applications as appropriate.

Help Desk Support

Information Technology Specialist I, II and Senior Information Technology Specialist: The ability to perform the Specialist I and Specialist II functions of the position; sustain regular work attendance; work cooperatively and effectively with users, students, staff, peers, and management; exercise initiative and mature judgment; work as a member of a team; and develop and meet schedules and time lines. The ability to learn and adapt to new technologies, procedures and policies; work independently with minimum supervision; and plan, organize, prioritize, and complete the workload of assigned areas of responsibility.

Senior Information Technology Specialist: The ability to perform the functions of the position. The ability to understand and explain complex procedures and instructions; learn and lead implementation efforts related to new technologies, procedures and policies; and plan, organize, and direct work and assignments. The ability to provide team leadership and direction; prioritize and coordinate activities with vendors, users, and staff. The ability to perform individual research, analysis, and evaluation of systems and programs; develop and present technical briefings and specifications; develop, coordinate, and enforce organization-wide information systems standards; and collect and analyze data utilizing computer applications as appropriate.

Institutional Research

Information Technology Specialist I, II and Senior Information Technology Specialist: The ability to perform the Specialist I and Specialist II functions of the position; sustain regular work attendance; work cooperatively and effectively with the public, students, faculty, and staff; exercise initiative and mature judgment; work as a member of a team; and meet schedules and time lines. The ability to learn and adapt to new technologies, procedures, and policies; work independently with minimum supervision; and plan, organize, prioritize, and complete the workload of assigned areas of responsibility. The ability to oversee the work of others and perform project management function when assigned; develop and present technical briefings and specifications; and develop, coordinate, and enforce organization-wide information systems standards. The ability to collect and analyze data utilizing computer applications as appropriate; prepare written and verbal reports on findings; and read and understand programming languages used in the District. The ability to design, code, test, and debug programs; apply vendor supplied modifications and upgrades to software packages; and coordinate multiple versions of applications and in-house modifications and vendor upgrades. The ability to analyze and design hardware and software systems and databases for research and Web-based applications; analyze raw data and convert to appropriate PC software application format; and design, implement, and manipulate on-line/interactive databases; and develop and administer training for technical and non-technical staff. Perform individual research, analysis and evaluations in state-of-the-art hardware/software information technology; manage, plan, and organize multiple concurrent projects; and

troubleshoot operating system and database problems

Senior Information Technology Specialist: The ability to perform the functions of the position. The ability to learn and lead implementation efforts related to new technologies, procedures, and policies. The ability to lead efforts to design, code, test, and debug programs and initiate the analysis of raw data and convert to appropriate PC software application format.

Configuration Management

Information Technology Specialist I, II, and Senior Information Technology Specialist: The ability to perform the Specialist I and Specialist II functions of the position; sustain regular work attendance; work cooperatively and effectively with users, students, staff, peers, and management; exercise initiative and mature judgment; work as a member of a team; and develop and meet schedules and time lines. The ability to learn and adapt to new technologies, procedures and policies; work independently with minimum supervision; and plan, organize, prioritize, and complete the workload of assigned areas of responsibility.

Senior Information Technology Specialist: The ability to perform the functions of the position. The ability to understand and explain complex procedures and instructions; learn and lead implementation efforts related to new technologies, procedures and policies; and plan, organize, and direct work and assignments. The ability to provide team leadership and direction; and prioritize and coordinate activities with vendors, users, and staff. The ability to perform individual research, analysis, and evaluation of systems and programs; develop and present technical briefings and specifications; develop, coordinate, and enforce organization-wide information systems standards; and collect and analyze data utilizing computer applications as appropriate.

Audio/Video Media Support

Information Technology Specialist I, II and Senior Information Technology Specialist: The ability to perform the Specialist I and Specialist II functions of the position; sustain regular work attendance; work cooperatively and effectively with faculty, users, students, staff, peers, and management; exercise initiative and mature judgment; work as a member of a team; and develop and meet schedules and time lines. The ability to learn and adapt to new technologies, procedures and policies; work independently with minimum supervision; and plan, organize, prioritize, and complete the workload of assigned areas of responsibility. The ability to perform individual research, analysis, and evaluation of systems and programs; develop and present technical briefings and specifications; and develop, coordinate, and enforce organization-wide information systems standards. The ability to collect and analyze data utilizing computer applications as appropriate; and integrate multiple PC platforms on a network and allow information sharing between/among platforms. Skill in inspecting and evaluating the quality of products; critical thinking; finding information and identifying essential information; and finding ways to structure or classify multiple pieces of information. Prioritize and coordinate activities with vendors, users, and staff; work effectively under pressure in a busy and demanding information services environment. The ability to provide team leadership and direction. Provide multimedia hardware/software and streaming expertise and production support.

Physical and Environmental Factors

Move, lift, and maintain computers and/or related equipment; stand, sit and maneuver for long periods; lift heavy objects with and without assistance; reach, grasp, pull, push equipment; stoop and crouch.

IT Specialist I/II and Senior Information Technology Specialist - Audio/Video Media Support: In addition to the above, the ability to move, lift, maintain, and service audio/visual, media systems and related equipment; stand, sit, and maneuver for long periods; bend/reach at wrist and knees; lift heavy objects (up to 50 pounds) with and without assistance; sometimes work above the ground; climb and work on a ladder; reach, grasp, pull, push equipment; stoop and crouch; work and maneuver through tight and cramped spaces; exposure to electrical panels, wiring, motors and controls; exposure to dust and allergens; manipulate hand and electrical tools, wires, cables, and related types of tools and equipment; must wear personal protective and safety gear when appropriate.

TYPICAL EQUIPMENT USED (May include, but not limited to):

Current office technologies including computers, printers, copiers, fax machine; network infrastructure cabling testers, patch cable testers, hand tools, volt/Ohm meter testers, cable strippers, crimping tools, 110-block punch down tools, and software troubleshooting applications.

IT Specialist I/II and Senior Information Technology Specialist - Audio/Video Media Support: In addition to the above, hand and power tools; test equipment; audio equipment; video equipment; projection equipment; broadband cable systems; field and postproduction equipment including linear and non-linear editing equipment, studio lighting equipment and peripherals; engineering and test equipment; distribution of equipment.