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| **MANAGER, INFRASTRUCTURE SYSTEMS AND APPLICATION DEVELOPMENT**  |
| **Reports to:**  | Dean, Academic Information Systems |  |  |
| **Dept:** | Academic Information Systems | **Range:** | 43 |
| **FLSA:** | Exempt | **EEO:** | Executive/Administrative/ Managerial |

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed by individual positions.*

### BASIC FUNCTION:

Under direction, plan, organize and manage the technology infrastructure systems/services and enterprise software application development teams that provide core information technology services for the district including administrative and instructional software systems, servers, network for voice, data and video communications, backup and recovery and data security; manage all data center system administration activities; manage purchase and contract negoti­ations for software and hardware; and perform related duties as assigned.

### ESSENTIAL DUTIES & RESPONSIBILITIES:

*The duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to this class.*

1. Plan, organize, control, integrate and evaluate the work of assigned Academic Informa­tion Systems (AIS) teams engaged in providing a secure technology infrastructure for district-wide IT applications and operations; with super­visors and staff, develop, implement and monitor work plans to achieve goals and objec­tives; contribute to the development of and monitor performance against the annual budget for all Infrastructure Systems and Application Development Services; supervise and participate in developing, implementing and evaluating plans, work processes, systems and procedures to achieve annual goals, objectives and work standards.
2. Manage the performance of the AIS infrastructure and applications development staff; inter­view and select new staff; establish perform­ance requirements and personal development targets; regularly monitor performance and provide coaching for performance improvement and development, in accord­ance with district human resources policies and labor contract agreements.
3. Provide day-to-day leadership and work with staff to ensure a high-performance, service-oriented work environment that supports achieving the department’s and district’s mission, objectives and values.
4. Manage the design, development, testing and implementation of application projects including the integration of new systems with existing systems and other technology solu­tions; serve as project manager for large-scale enterprise software development, upgrade and enhancement projects; work with application developers on defining needs and priori­tizing custom development of software and applications including customization for enter­prise and web portal systems; review and approve project scope of work, detailed project plans, milestones and deadlines.
5. Direct the development, update and maintenance of the district’s websites and web portal; with web application developers, create web standards and features; oversee implementa­tion of new website applications.
6. Supervise the design, development, installation, maintenance, system security and support for an effective, reliable interoperating infrastructure to promote the sharing of information and operations; oversee the monitoring of system and network performance; forecast require­ments and perform capacity planning studies; oversee the maintenance and modi­fication of software to expand capacity and maintain operations to meet department/enter­prise requirements; recommend the purchase and upgrade of IT security, network and oper­ating system hardware and software; participate in the coordination of enterprise data at the infrastructure level together with data storage systems to facilitate and promote the shared use of data.
7. Supervise the design, analyses and monitoring of enterprise applications databases; plan, organize and execute the migration and conversion of data; ensure the integrity and security of data; supervise and participate in department/enterprise disaster recovery planning and data security administration; oversee the administration of application-level security proto­cols; assign roles and permissions.
8. Negotiate and administer vendor, outsourcer and consultant contracts and service agree­ments; writes RFPs for new service needs, work with current vendors to extend or modify current support contracts and work with outside consultants on various information tech­nology-related projects including physical infrastructure construction, network cabling and custom software development.
9. Ensure that escalated help desk tickets are completed timely and appropriately; monitor system operations and performance; ensure timely and effective problem identification and resolu­tion; investigate and resolve escalated customer concerns and complaints; supervise the development of system, network and customer documentation.
10. Monitor best practices in applicable disciplines to bring technology and business intelli­gence and advice to district and department managers.

### OTHER DUTIES:

1. Participate in and assist in development of the district’s technology master plan; participate on the district Technology Advisory Committee regarding the selection, implementation and use of computing facilities and resources/
2. Design and create processes to facilitate reporting.
3. Work with software, hardware, telecommunications and network vendors; attend related meetings and workshops.
4. Monitor and review new technology products and technology tools; review available informa­tion in industry publications, technical websites and others to evaluate opportunities to better meet district business, operational, productivity and technical requirements.
5. Maintains up-to-date technical knowledge by attending educational workshops, reviewing professional publications, establishing personal networks and participating in professional associations.
6. Perform related duties as assigned.

### KNOWLEDGE AND ABILITIES:

### KNOWLEDGE OF:

1. Principles, practices and techniques of information systems management, including applica­tions design, hardware and software options for administrative, business and academic functions.
2. System integration design concepts as they relate to application design and development.
3. System and software development life cycle.
4. Operating system architectures and characteristics, components, uses and limitations applicable to the district information tech­nology environment.
5. Principles and methods of systems analysis and application design principles and development methodologies and tools.
6. Database management systems and software, including architectures, diagnostic tools, commands and utilities.
7. Network architectures and theory and principles of secure network design and integration.
8. Principles, practices and methods of cyber-security infrastructure and vulnerability manage­ment.
9. Principles and methods of enterprise-level data management and data storage technology solutions.
10. Systems/network configuration and management; internet/intranet technologies and design concepts.
11. Project management methods, tools and techniques; troubleshooting principles and practices applicable to areas of responsibility.
12. Applicable federal, state and local laws, rules and regulations including OSHA rules and regulations.
13. Principles and practices of sound business communication.
14. Principles and practices of public administration, including budgeting, purchasing and main­taining public records.
15. Research methods and analysis techniques including cost-benefit analyses.
16. Principles and practices of effective management and supervision.
17. District human resources policies and labor contract provisions.
18. Safety policies and safe work practices applicable to the work.

### ABILITY TO:

1. Plan, organize, manage, assign, delegate, review and evaluate the work of staff engaged in providing information technology services to the district and community.
2. Build teamwork and collaboration with other AIS teams and departments to optimize results.
3. Manage a broad range of complex applications development, upgrade, administration and maintenance activities.
4. Establish and maintain project and production schedules and balance responsibilities for multiple projects to ensure timely, high-quality results.
5. Identify information and technology management issues and opportunities, analyze complex problems and alternatives and develop sound conclusions and recommendations.
6. Assess customer needs, set priorities and allocate resources to most effectively meet needs in a timely manner.
7. Perform business process analyses and reach sound, logical conclusions regarding user needs and business requirements.
8. Understand and apply functional requirements to the development of systems proposals, specifications and recommendations for cost-effective information systems and technology solutions.
9. Read, interpret, explain and apply technical information on business processes, software and hardware for technical and non-technical users.
10. Analyze short and long-term business and technology needs.
11. Develop and maintain effective customer relationships with other department managers and customers.
12. Make sound, expert independent decisions within general policy guidelines.
13. Organize, set priorities and exercise expert independent judgment within areas of responsi­bility.
14. Develop and implement appropriate procedures and controls.
15. Prepare clear, concise and comprehensive correspondence, reports, studies and other written materials.
16. Communicate effectively, both orally and in writing.
17. Understand, interpret, explain and apply applicable laws, codes and ordinances.
18. Represent the district effectively in dealings with vendors, other community colleges and industry groups.
19. Present proposals and recommendations clearly, logically and persuasively.
20. Operate a computer and standard business software.
21. Use tact and diplomacy in dealing with sensitive and complex issues, situations and concerned people.
22. Demonstrate sensitivity to and understanding of diverse academic, socioeconomic, cultural, ethnic and disability issues.
23. Establish and maintain effective working relationships with all those encountered in the course of work.

**EDUCATION AND EXPERIENCE:**

### Graduation from an accredited four-year college or university with a bachelor’s degree in management information systems, computer science, business administration or a related field, and at least six years of progressively responsible experience in the design and development of information systems, networks and operating systems or database manage­ment, at least two of which were at a project management or supervisory level; or an equivalent combination of training and experience. Experience in an academic environment is preferred.

### LICENSES AND OTHER REQUIREMENTS:

A valid California driver’s license and the ability to maintain insurability under the district’s vehicle insurance program.

**WORK DIRECTION, LEAD AND SUPERVISORY RESPONSIBILITIES:**

Provides work direction to infrastructure engineer, database administrator, application develop­ers, network and systems administrators, student workers and vendors/contractors as required.

**CONTACTS:**

Administrators, faculty, staff, network service providers, vendors and other community college IT managers and staff.

**PHYSICAL EFFORT:**

*The physical efforts described here are representative of those that must be met by employees to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

Primarily sedentary with intermittent standing, walking, bending and stooping; occasional light lifting and carrying of objects weighing up to 25 pounds; ability to travel to a variety of locations on and off campus as needed to conduct district business.

**EMOTIONAL EFFORT:**

Ability to develop and maintain effective working relationships involving interactions and com­munications personally, by phone and in writing with a variety of individuals and/or groups from diverse backgrounds on a regular, ongoing basis; ability to work effectively under pressure on a variety of tasks concurrently while meeting established deadlines and changing priorities.

**WORKING CONDITIONS:**

Primarily business office environment; subject to frequent public contact and inter­ruption; inter­mittent exposure to individuals acting in a disagreeable fashion; may work at any district location or authorized facility with occasional evenings and/or week­ends on an as-needed basis. Occa­sional local travel may be requested.