

SOUTHWESTERN COMMUNITY COLLEGE DISTRICT

CLASS TITLE SYSTEMS ARCHITECT

SUMMARY DESCRIPTION

Under general direction of the Chief Information Systems Officer or designee , performs a variety of activities including: research, design, development, implementation and maintenance of computer systems and applications; assist in developing and maintaining standards and procedures to obtain optimum, reliable performance of installed systems; lead systems and software application installations and implementations including existing application module updates and/or new application module installations; coordinate tasks and resources required for those implementation and development efforts; program and support complex systems as necessary including system interfaces.

REPRESENTATIVE DUTIES

The following duties are typical for this classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

1. Troubleshoot and solve complex data exchange issues between the College District Enterprise Resource Planning system and other data systems. **E**
2. Perform Business Analyst duties as required to understand customer needs and expectations related to system functions and capabilities. **E**
3. Evaluate the performance and utilization of computer systems and make appropriate recommendations to management concerning effectiveness, efficiency and quality assurance. **E**
4. Perform project management activities such as estimating, scheduling, tracking and adjusting resource utilization to define plans and assure timely, accurate installations of computer systems and applications; work closely with vendors and institutional administrators to schedule resources. **E**
5. Perform research and analysis for supported systems and projects
6. Assist Database Administrator in the performance of software system administration and database administration duties related to enterprise databases, especially SQL, and applications as assigned, including installation and configuration of patches and upgrades, taking a lead role in coordinating technical and user acceptance testing. **E**
7. Work closely with networking personnel to ensure proper hardware and operating system setups and configurations for system upgrades and implementations on supported systems. **E**
8. Provide technical support to programmers, analysts, operators and end users; **E**
9. Work directly with vendors to implement and maintain systems according to requirements listed in approved contracts; assist in the development of contractual requirements for systems and systems upgrades. **E**
10. Work closely with administrators to ensure timely and effective user communication related to updates of existing systems, new implementations, and operational changes in IT. **E**
11. Keep IT administration abreast of progress and issues related to incidents, projects, operations and new or updated process changes. **E**
12. Write and debug complex computer programs. **E**
13. Coordinate systems to integrate standards and maintain quality. **E**
14. Perform related duties and responsibilities as required.

KNOWLEDGE AND ABILITIES

Knowledge of:

Advanced computer science applications and project leadership methodologies. Structured systems analysis methodology techniques to build systems.
Documentation needs and requirements written well enough to easily perform knowledge transfers of system requirements to other members of Institutional Technology.
Relational database design, implementation and optimization, especially T-SQL and Microsoft SQL Server.
Advanced knowledge of programming languages used in support of college applications.
Best practices for software design, development and implementation.
Concepts of Project Management as applied to information technology projects.
Knowledge of process diagramming (DFDs, flowcharts and/or other methods).
Design and delivery of computer systems and services in a higher educational environment.
Higher education administrative applications such as Student Systems, Financial Aid and Human Resources.
Personal computers including their operating systems and applications.
Advanced knowledge of data transport protocols and tools including data security techniques, APIs and differing forms of FTP.

Ability to:

Know, understand and actively assist in enforcing established security policies and guidelines by following them, implementing them, and training others.
Lead the investigation and analysis of complex problems using interpersonal skills and technical knowledge to draft and propose effective solutions.
Lead effectively in the investigation, planning, design and installation of systems and applications projects.
Evaluate complex business problems and effectively communicate alternative solutions at the technical, user and administrative levels.
Estimate, schedule, track and adjust projects to effect timely completion of projects is essential.
Work effectively with management and skilled technical personnel in a professional manner.
Apply advanced programming skills to the solution of complex technical problems.
Analyze complex systems and network problems and provide solutions that maximize performance, effectiveness and efficiency.
Work with and exhibit sensitivity to and understanding of the diverse racial, ethnic, disabled, sexual orientation, and cultural populations of community college students.
Communicate clearly and concisely, both orally and in writing.
Establish and maintain effective working relationships with those contacted in the course of work.

EDUCATION AND EXPERIENCE

Any combination equivalent to: Bachelor's degree in a Technical, or Computer Science or related field and three years experience at progressively responsible programmer/programmer analyst levels.

LICENSE OR CERTIFICATE

Valid California driver's license and a safe driving record.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

SOUTHWESTERN COMMUNITY COLLEGE DISTRICT
Systems Architect - *Continued*

Environment: Work is performed primarily in a standard office setting with frequent interruptions and distractions; subject to excessive noise from equipment operations; extended periods of time viewing computer monitor; exposure to dissatisfied individuals.

Physical: Primary functions require sufficient physical ability and mobility to work in an office setting; to stand or sit for prolonged periods of time; to occasionally stoop, bend, kneel, crouch, reach, and twist; to lift, carry, push, and/or pull light to moderate amounts of weight; to operate office equipment requiring repetitive hand movement and fine coordination including use of a computer keyboard; and to verbally communicate to exchange information.

Vision: See in the normal visual range with or without correction.

Hearing: Hear in the normal audio range with or without correction.

Created: May, 1995
Ewing & Company

Revised: January 2007
Johnson & Associates

Revised: June, 2018
(replaces Senior Systems
Analyst)
Institutional Technology