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| **WEB APPLICATIONS DEVELOPER**  |
| **Reports to:**  | Manager, Infrastructure Systems and Application Development |
| **Dept:** | Academic Information Services | **Range:** | 33 |
| **FLSA:** | Exempt | **EEO:** | Professional/Nonfaculty |

*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 general supervision, perform a wide variety of advanced professional duties in the man­age­ment, design, development, implementation, maintenance and associated security require­ments of the district’s websites and related applications; ensure the effectiveness of overall website performance; work with users to address business, administrative, aca­demic, student and community needs and issues through the use of web-based technology solu­tions; serve as lead developer, architect and administrator for web portals; 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. Analyze business objectives and customer requirements for new or modified internet/intra­net sites and translate into functional solutions for the district; design and lead in the devel­opment of web-based projects; define database requirements, functionality and utilization; develop project specifications including database and programming specifications; design and develop application database structures, tables, entity relationships and security privileges; design screens, menus, navigation tools and report formats; write web-based front-end applications, HTML code and scripts for website applications; test web applica­tions to ensure displays meet ease-of-use and accessibility standards and execute properly for multiple browsers; ensure designs make efficient use of network and database resources by using server-side programming languages as well as third-party design patterns to stream­line communication between websites and backend relational database storage; adapt purchased software as needed to ensure compatibility and proper interaction with existing systems and applications.
2. Develop and maintain web server architecture in coordination with infrastructure systems staff to ensure functionality, integrity and security of sites and applications; develop, review and integrate new web pages, graphics and other elements; create online help functions, including application documentation; administer district content management system and services in coordination with the Public Information office to include the maintenance of HTML templates, image archives, permissions and user roles, work flow and guidelines for web publication.
3. Coordinate with Access Specialist to ensure all district web services are ADA compatible; thoroughly inspect all user-submitted drafts to ensure they meet the district’s Branding and Web Style Guide as approved by the Board of Trustees.
4. Provide user support via help desk tickets, phone calls, email and online meeting software; troubleshoot website, applications and network problems.
5. Lead or assist in the analysis and evaluation of new web technology, products, hardware and tools to optimize the development and functionality of websites and applications; test and develop prototype solutions; monitor and prepare reports on website traffic; recommend technical strategic planning.
6. Conduct systems analyses and design studies; prepare concept and design specifications and management reports; develop and recommend cost-effective technical system improve­ments; coordinate work with other professional staff responsible for applications develop­ment and administration, network administration and database administration to ensure that district website architecture, functionality and design are consistent with all information tech­nology strategies.
7. May serve as project leader for web development and maintenance assignments; define project scope and boundaries; perform critical path analyses and set project priorities; devel­op project task lists and time estimates; perform cost-benefit analyses; assign and manage the completion of project tasks to meet time, quality and cost expectations; use project management tools to monitor and report on progress; meet with customers to review project status and resolve development/implementation issues.
8. Participate in selecting vendors and consultant/contractor staff; assist in negotiating, manag­ing and administering development/vendor contracts.
9. Provide on-call web applications support.

### OTHER DUTIES:

1. Serve as a resource for campus departments and provide education to faculty and staff on issues concerning content and presentation of information on district websites including timeliness and accuracy of web content; assist with adherence to applicable legal require­ments as well as district web publish­ing standards and policies regarding technology usage, and data security.
2. Develop training materials and online videos; conduct training workshops and provide one-on-one instruction as needed; create and maintain web knowledge base and FAQs.
3. Perform related duties as assigned.

### KNOWLEDGE AND ABILITIES:

### KNOWLEDGE OF:

1. Principles, methods and techniques of systems analysis and design.
2. The systems development life cycle.
3. Systems design principles and applications development methodologies and tools.
4. Operating system architectures, characteristics, components, uses and limitations particu­larly as they apply to the district’s web technologies environment.
5. Current and emerging internet/intranet technologies and associated products, tools and equipment.
6. Principles and methods of and techniques in designing robust, scalable web architec­tures and applications.
7. Advanced web programming and graphics markup languages.
8. Network architecture and principles and practices of network design.
9. Network communication protocols; principles and practices of network security and security protocols.
10. Website usability concepts, such as navigational aids, knowledge management and infor­mation rendering.
11. Principles and practices of applications database design and development; basic principles and practices of systems administration applicable to assigned responsibilities.
12. Federal, state and local laws, codes and regulations pertaining to the use of internet tech­nologies.
13. Methods and techniques for preparing systems and customer documentation.
14. Project management tools and techniques, including preparing and managing detailed project schedules and metrics and change management and control.
15. Methods and techniques for troubleshooting website, applications and network problems.
16. Safety policies and safe work practices applicable to the work.
17. Written and oral communication skills including correct English usage, grammar, spell­ing, punctuation and vocabulary.

### ABILITY TO:

1. Perform business process analyses and reach sound, logical conclusions regarding customer needs and business requirements.
2. Understand and apply the analysis of functional requirements to the development of systems proposals, specifications and recommendations for efficient, cost-effective web technology solutions.
3. Conceptualize practical web-based solutions to district, departmental and customer require­ments.
4. Plan and complete projects efficiently and in accordance with district quality standards.
5. Coordinate work effectively with other departments responsible for website content and presentation.
6. Troubleshoot and resolve website, applications and network problems.
7. Develop and conduct effective customer training.
8. Prepare clear, concise and accurate systems documentation and reports of work performed.
9. Communicate effectively, both orally and in writing.
10. Understand and follow written and oral instructions.
11. Operate a computer and standard business software.
12. Demonstrate sensitivity to and understanding of diverse academic, socioeconomic, cultural, ethnic and disability issues.
13. Establish and maintain effective working relationships with all those encountered in the course of work.

### EDUCATION AND EXPERIENCE:

### Graduation from an associate degree program in management information systems, computer science or a related field, and at least three years of progressively responsible experience in systems analysis and applications design; or an equiva­lent combination of training and experience.

### 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:**

Project lead responsibilities.

**CONTACTS:**

AIS staff, faculty, administrators, staff of other departments, students, vendors and the public.

**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 lifting carrying, pulling and/or pushing of objects weighing up to 35 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 interruptions by individuals in person or by telephone; 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 required.