CLASS SPECIFICATION
Web Developer II – Instructional Technology and Distance Learning

FLSA Status: Exempt
EEOC Job Category: Professionals
Union Representation: Represented

GENERAL PURPOSE
Under direction, performs a wide variety of advanced professional duties in the research, design, implementation and maintenance of District e-learning web sites, applications and tools; ensures the effectiveness of web-enhanced and Distance Learning course environments and program websites; identifies, develops and maintains instructional, communication and assessment tools for course site and related web-based activities; performs server administration duties; and performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS
Web Developer II – Instructional Technology & Distance Learning (ITDC/DL) performs advanced and specialized professional duties to support and promote the District's e-learning environment and technology-based Distance Learning curricula. The incumbent independently performs complex and highly responsible professional duties involving the planning, design, development, testing, implementation and maintenance of e-learning course websites, applications and tools and their associated security requirements following technical/pedagogical approaches set by the School of Learning Resources, Teaching and Technologies. The incumbent serves as the School's systems and web administrator, insuring sound systems security structures and protocols.

Web Developer II – Instructional Technology & Distance Learning is distinguished from Web Developer II in that an incumbent in the former class independently performs complex analysis and development responsibilities associated with the District's e-learning environment, requiring specialized knowledge of e-learning, instructional technology and associated methods, products and tools.

ESSENTIAL DUTIES AND 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. Identifies and analyzes faculty needs for new or modified Internet/Intranet instructional tools and associated applications; designs, develops and maintains e-learning instructional and assessment tools and e-learning web environments; defines ITDC/DL and application database requirements, functionality and utilization; creates conceptual design frameworks; develops project specifications including database and programming specifications; designs and develops application database structure, tables, entity relationships and security privileges; designs screens, menus, navigation tools and report formats; writes web-based applications, HTML and other code and scripts for web site
applications; tests e-learning applications to ensure they meet instructional design principles, ease of use and flexibility standards, execute properly for multiple browsers and comply with ADA accessibility requirements; ensures designs make efficient use of network and database resources.

2. Ensures a consistent logic and brand across all ITDC/DL web-based instructional tools, applications and environments; ensures functionality, integrity and security of instructional websites, tools and applications; coordinates web application development with ACIT to ensure effective integration, production and security; leads efforts and works with ACIT to establish, maintain and upgrade an integrated portal system to deliver Distance Learning and web-enhanced courses of all types across LBCC academic programs; works with ACIT staff to identify and set up Storage Area Networks as they apply to ITDC/DL systems.

3. Researches and evaluates new e-learning information and communication technologies and the development and functionality of instructional websites used by students and faculty on- and off-campus; conducts complex systems analysis, business process analysis and design studies; prepares concept and design specifications and management reports; develops and recommends cost-effective technical system improvements; coordinates work with other professional staff responsible for applications development and administration, network administration and database administration to ensure that instructional web site architecture, functionality and design follow instructional technology strategies.

4. Develops and maintains an overall focus and concept for ITDC/DL web pages, in keeping with LBCC and School priorities, objectives and strategic plan; ensures consistency in technical and pedagogical approach in ITDC/DL course websites; collaborates with the Instructional Technology Development Center team on website development and maintenance activities.

5. Assists the Director in design of instructional activities such as computer-mediated assessments, content processors, interactive courseware and other activities; assists in communication, marketing and outreach efforts with DL students.

6. Performs systems and web administration duties, including server and database administration; sets up, configures, troubleshoots and maintains LRTT servers; administers SQL server databases, including creating accounts and maintaining security protocols; monitors and responds to network outages, incursions and attacks, abuse and security violations and coordinates efforts with ACIT staff.

OTHER DUTIES

1. Provides systems engineering, training and multimedia support to other ITDC staff on a variety of matters including live and on-demand web broadcasts, multimedia courseware authoring and web accessibility for disabled students.

2. Stays abreast of industry trends and changes in e-learning and instructional technology to keep skills and knowledge current.

3. Provides training and support for Help Desk staff; assists in developing help desk system innovations needed for faculty, students and staff.

4. Prepares various reports and materials as required.
QUALIFICATIONS

Knowledge of:

2. Basic instructional and pedagogical concepts and methods and their application in the development of e-learning applications and tools.
3. Principles, methods and techniques of systems analysis and design.
4. Systems design principles and applications development methodologies and tools.
5. Programming theory and languages and operating systems capabilities and constraints applicable to the School's technology and e-learning environment.
6. Principles, methods and techniques in instructional website architecture and design.
7. Standard web programming and graphics mark-up languages.
8. Network architecture and principles and practices of network design.
11. Web site usability concepts, such as navigational aids, knowledge management and information rendering.
12. Principles and practices of applications database design and development.
13. Basic principles and practices of systems administration, applicable to assigned responsibilities.
14. Federal, state and local laws, codes and regulations pertaining to the use of internet technologies.
15. Methods and techniques for preparation of systems documentation.
16. Project management tools and techniques, including preparation and management if detailed project schedules and metrics and change management and control.
17. Methods and techniques for troubleshooting web site, applications and network problems.
18. Principles and practices of sound business communication.

Ability to:

1. Work collaboratively with faculty and non-technical staff members and show sensitivity and understanding for their pedagogical, operational and instructional technology needs, as well as the needs of students.
2. Perform business process analyses and reach sound, logical conclusions regarding faculty and student e-learning needs and business requirements.
3. Understand and apply the analysis of functional requirements to the development of instructional technology proposals, specifications and recommendations for efficient, cost effective e-learning solutions.

4. Conceptualize practical web-based instructional solutions for faculty and students.

5. Plan and complete projects efficiently and in accordance with District quality standards.

6. Troubleshoot and resolve web site, application, database and network problems.

7. Prepare clear, concise and accurate systems documentation and reports of work performed.

8. Make sound independent judgments within established policy and guidelines.

9. Communicate clearly and effectively orally and in writing.

10. Coordinate work effectively with other departments responsible for web site content.

11. Keep technical skills current to meet continuing instructional technology assignments.

12. Establish and maintain effective working relationships with deans, administrators, managers, faculty, students, staff, consultants and others encountered in the course of work.

**Education, Training and Experience:**
A typical way of obtaining the knowledge, skills and abilities outlined above is graduation from a college or university with a major in computer science, management information systems or a closely related field; and five years of progressively responsible experience in applications design, including at least two years of experience in the development and uses of instructional web technologies and tools in an e-learning environment; or an equivalent combination of training and experience.

**Licenses; Certificates; Special Requirements:**
A valid California driver's license and the ability to maintain insurability under the City’s vehicle insurance policy.

**PHYSICAL AND MENTAL DEMANDS**
The physical and mental demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

**Physical Demands**
While performing the duties of this class, employees are regularly required to sit; talk or hear, in person and by telephone; use hands repetitively to finger, handle, feel or operate computers and other standard office equipment; and reach with hands or arms. Employees are frequently required to walk and stand. Employees occasionally stoop, kneel, bend, crouch or crawl and lift up to 50 pounds.
Specific vision abilities required by this job include close vision, use of both eyes, ability to distinguish basic shades and colors and the ability to adjust focus.

**Mental Demands**

While performing the duties of this class, incumbents are regularly required to use oral and written communication skills; read and interpret complex data, information and documents; analyze and solve complex problems; use math and mathematical reasoning; learn and apply new skills or information; perform highly detailed work on multiple, concurrent tasks; work under changing deadlines with frequent interruptions; work effectively as a team member, alternating between differing team roles and assignments on a regular basis; and interact with deans, managers, faculty, students, staff, consultants and others encountered in the course of work.

**WORK ENVIRONMENT**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Employees work under typical office conditions and the noise level is usually quiet. Some assignments may expose employees to risk of shock and radiation.