DEFINITION

To serve as systems administrator for an online class management system and other academic technology systems software and hardware infrastructure; to train and provide a wide range of technical support to faculty and students in uses of academic technology systems; and to integrate video, graphics and other technology solutions with an online class management system and District web sites.

SUPERVISION RECEIVED AND EXERCISED

This class receives supervision from the Supervisor, Academic Technology and general direction from the Academic Technology Resources Center (ATRC) faculty coordinator.

ESSENTIAL AND MARGINAL FUNCTION STATEMENTS

Essential and other important responsibilities and duties may include, but are not limited to, the following:

Essential Functions:

1. Perform systems administration duties for an online class management system and other web-based academic technology systems software and hardware infrastructure; install, upgrade, configure, monitor, maintain and administer applications and database software, servers and other devices in both production and test environments; write and execute custom SQL and other scripts and statements; ensure the security and integrity of systems software and databases.

2. Design and implement data models and database designs; monitor database performance and troubleshoot and resolve capacity, replication and other distributed data issues.

3. Design, develop and maintain District and faculty websites and pages; perform systems administration duties for web servers, including assigning rights and permissions to faculty and District staff; design, develop and integrate graphic and streaming media solutions; design and develop video/audio capture tools; train faculty on web design, authoring and management concepts, methods and tools.

4. Perform system backup and restore procedures, ensuring accuracy and integrity of data; troubleshoot and resolve complex software and hardware problems; obtain technical support from software vendors as required; coordinate the resolution of network infrastructure problems with Information Services.

5. Provide technical and informational support ranging to faculty and student system users; advise faculty on design of online and web enabled instructional materials to enhance
student/materials interaction and ease of accessibility; assist faculty in constructing instructional materials; develop and deliver periodic workshops on system features and uses.

6. Develop and maintain detailed technical documentation of systems operations and functionalities; propose and document procedures to achieve high quality online education; advise faculty on best methods and techniques for online education.

7. Research academic uses of new and emerging technologies; propose hardware and software purchases; coordinate ATRC equipment purchases and maintenance of inventory and controls.

**Marginal Functions:**
1. Perform related duties and responsibilities as required.

**QUALIFICATIONS**

**Knowledge of:**

1. Operating system architecture, characteristics, capabilities, constraints and commands applicable to an academic technology environment.
2. Principles, practices and methods of systems administration and maintenance, including configuration, performance tuning and diagnostic tools and systems/network management tools and utilities.
3. Methods and techniques of systems troubleshooting and problem resolution.
4. Web-based technologies and design concepts and techniques, including security protocols and applicable programming languages.
5. Database management systems and software, including architectures, diagnostic tools, commands and utilities.
6. Website usability concepts, such as navigational aids, knowledge management and information rendering.
7. Principles and practices of graphic communications.
8. Principles and practices of sound business communication in a college environment.
9. Instructional concepts and techniques as they apply to areas of responsibility.
10. Local, State, and Federal regulations, including terminology and processes applicable to areas of assigned responsibility.
11. Correct English usage, including spelling, grammar, and punctuation.

**Ability to:**

1. Install, configure, troubleshoot and maintain operating systems and hardware, application software and databases to achieve optimal technical performance and user support.
2. Analyze functional requirements for the development of systems proposals, specifications and recommendations for efficient, cost-effective technology solutions.
3. Conceptualize practical and creative technology solutions to District and faculty requirements.
4. Plan and complete projects efficiently and in accordance with District quality standards.
5. Plan and conduct effective user training.
6. Communicate effectively, orally and in writing.
7. Prepare clear, concise and accurate documentation, reports of work performed and other written materials.
8. Keep technical skills current with advances in technology related to areas of responsibility.
9. Establish cooperative working relationships with others encountered in the course of work.
10. Maintain physical condition appropriate to the performance of assigned duties and responsibilities.
Experience and Training Guidelines
Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Experience:

Five years of increasingly responsible experience in the development and administration of systems and web-based technology in a large and complex information systems environment.

Training:

Equivalent to a Bachelor’s degree university in computer science, information systems or a related field, or relevant industry certification.

License or Certificate
Possession of, or ability to obtain, an appropriate, valid driver's license.

WORKING CONDITIONS

Environmental Conditions:

Computer laboratory; occasional travel to various education centers; exposure to computer screens; extensive contact with students and faculty.

Physical Conditions:

Essential and marginal functions may require maintaining physical condition necessary for walking, standing or sitting for prolonged periods of time; moderate lifting; repetitive use of hands to operate computer equipment; extensive use of computer keyboard; near visual acuity for reading computer screens.