



Job Description

(For Positions in CAW Local 555, Unit 1)

Job descriptions do not include every duty that an individual in a position performs. They are intended to be representative and characteristic of the duties required and the level of work performed. Depending upon the size of the department or unit and its functional activities, incumbents who fall into this category may perform all of the duties listed below or, in the case of large departments or units, may be assigned to designated specialized functions.

JD #:	JD00809	Pay Grade:	10
JD Title:	Systems Specialist	JD FTE Hours:	35
Job Family:	IT		

General Description

Responsible for creating, maintaining and managing complex, multi-user, heterogeneous systems in a robust, production quality computing environment. Maintain data security and integrity and provide technical advice, as the lead technical person, to faculty on undergraduate lab material and their respective research areas. Also responsible for leading and participating in the systems analysis phase of development projects, and in the documentation, final preparation, and introduction of new systems and services into the production environment.

Representative Duties & Responsibilities

- Design, configure and implement specialized systems that integrate academic requirements into computer laboratories, serving multiple users.
- Design online systems to support various undergraduate courses across the department.
- Compile, debug and fix complex programs using various computing and scripting languages, accepting multiple inputs and generating multiple outputs and file formats.
- Analyze technical issues, and diagnose and resolve the problem.
- Debug computer program code.
- Present the design specifications of new instructional applications and provide walkthrough of systems and their interconnectivity with other systems in the department.
- Commission and transition new systems that require the application of software life cycle management.
- Test technologies to assess functions and deficiencies.
- Solve diverse and unusual problems by analyzing information where considerable interpretation of process is required.
- Manage technical application enhancements of new and existing instructional systems.
- Use and modify existing software to conduct system performance analyses.
- Install, service, and manage core servers on a variety of platforms.
- Configure, deploy, diagnose, and service network and server equipment, security appliances, and email and file sharing services.
- Document network, firewall, and server configurations.
- Produce functional and detailed system design specifications that satisfy instructional requirements and development standards.
- Coordinate the installation, testing, and linking of networks, servers, and workstations.
- Coordinate the activities of others required to meet instructional systems delivery requirements, testing, and implementations activities.
- Maintain and schedule licensing and system upgrades.
- Maintain and manage critical secured data and system backups.
- Provide technical advice and recommendations regarding the purchase of hardware, software, and computer peripherals.
- Negotiate contract licenses and service agreements with vendors.
- Exchange technical information with colleagues and vendors.
- Explain and exchange technical concepts and information to clients in a non-technical manner to ensure the client comprehends the issue.
- Provide estimates of time and resources required to complete projects.
- Gather and compile information from event and security logs to locate connectivity problems.

Representative Duties & Responsibilities

- Prepare contingency plans for recovering operations after a disaster such as power blackout, structural building failures, fire or water damage.
- Work with and understand complex data models and databases for the most effective and efficient organization of data based on processing requirements.
- Monitor and maintain existing instructional applications and production systems to ensure the system remains free of technical errors.
- Create and manage active directory domains.
- Monitor environmentally controlled server rooms including, but not limited to, temperature, humidity, and airflow, and respond to changes that occur.
- Remain current with frequent changes related to new technology, applications, and network equipment in the field.

Supervision

- Ongoing responsibility for supervising up to 9 casual employees at any one time.

Qualifications

- Bachelor's degree in Computer Science or related field of study.
- Requires 3 years of relevant experience.

Effort

Physical Effort:

- A typical work day consists of greater than 3.5 hours of low physical effort for activities such as:
 - Intermittent periods of keyboarding to document configuration and install hardware and software.
- A typical work day occasionally requires moderate physical effort for activities such as:
 - Lifting and moving moderate weight and awkward objects such as computer equipment and peripherals.
 - Working in awkward or constrained physical positions when installing and repairing equipment.
- Elements of high physical effort are not a regular feature of this job.

Mental Effort:

- A typical work day occasionally requires routine mental effort for activities such as:
 - Collecting routine information, word processing routine documents such as correspondence and reports, and inputting data in databases and spreadsheets.
- A typical work day consists of up to 2 hours of moderate mental effort for activities such as:
 - Commissioning and transitioning new systems that require the application of software life cycle management.
 - Testing technologies to assess functions and deficiencies.
 - Using and modifying existing software to conduct system performance analyses.
 - Installing, servicing, and managing core servers on a variety of platforms.
 - Configuring, deploying, diagnosing, and servicing network and server equipment, security appliances, and email and file sharing services.
- A typical work day consists of greater than 3.5 hours of high mental effort for activities such as:
 - Designing specialized systems that integrate academic requirements into computer laboratories, serving multiple users.
 - Designing online systems to support various undergraduate courses across the department.
 - Debugging and fixing complex programs using various computing and scripting languages, accepting multiple inputs and generating multiple outputs and file formats.
 - Analyzing technical issues, and diagnosing and resolving the problem.
 - Solving diverse and unusual problems by analyzing information where considerable interpretation of process is required.

Working Conditions

Physical Environment:

- Occasionally exposed to dust while cleaning and repairing computer equipment.
- Occasionally required to work in confined spaces while installing and repairing computer equipment.

Psychological Environment:

- Occasionally interacts with individuals who may be rude or upset.
- Frequently handles competing requests from multiple sources.

Health & Safety:

- Climbs ladders to install and repair equipment and to access servers and networks.