JOB FAMILY CONCEPT

This job family consists of four levels of Information Systems managerial work, which are distinguished based on the complexity of the responsibilities assigned, including the direction of management information programs and services of varying sizes, scope and range of operating systems or subsystems, operating budgets, and other related factors characterized by the type of equipment, enterprise considerations/responsibilities and number of staff. It is distinguished from supervisor by the greater degree of responsibility assigned, number of staff managed, and the addition of management accountability or the responsibility to serve as a strategic advisor.

Typically, positions supervise lower level managers, supervisors or work units responsible for developing, implementing, and maintaining programs involving one or more activities related to information systems and services, applications development, network and systems maintenance, computer operations, user consultation and support or similar functions. May direct a major mission critical program with limited staff or serve as a strategic advisor to executive and senior level managerial staff with authority independently to commit the organization to mission critical projects or expenditures.

Incumbents may perform one or more of the following functions in support of a wide range of diverse and complex information system needs and environments:

- Identify system needs including maintenance and upgrades
- Conduct research and development
- Consult with users
- Provide liaison with others
- Supervise staff
- Do strategic planning
- Set goals
- Plan for budgeting needs
- Monitor fiscal activities
- Oversee purchasing
- Evaluate high-level services and programs
- Serve as strategic advisor

Positions in this family fall into two broad categories of Operations/Systems and User Support/Consultation. Responsibilities may overlap.

- **Operations** involve functions and activities related to computer operations, production processes and network operations.

- **Systems** involve functions and activities related to the development and maintenance of applications systems, data base management systems, network systems, security,
upgrades, research and development and other essential elements of the infrastructure.

- **User Support** involves identification and resolution of user problems related to operational or system functions.

- **Consultation** involves coordination of requests for services between users and operating or applications systems staff; training or assisting users with various systems applications; responding to problems, and coordinating with operations or technical staff to effect solutions or enhance systems performance.

**TYPICAL FUNCTIONS**

*Note: Any single position will not usually involve all of the functions listed and many positions will involve functions that are not listed.*

- Meets all information technology requirements of the institution or division by planning, organizing and implementing information management strategy, directing all operations and activities of a major management information services program or function related to the design, development, operation and maintenance of computer operating systems and data processing functions.

- Evaluates systems; projects needs for upgrading hardware or software; works with product development, sales, and marketing to discern competitiveness of new technologies; makes recommendations concerning the selection and purchase of equipment, vendor products or services; develops budgets and monitors expenditures.

- Consults with users to identify data processing requirements; sets priorities; directs assigned staff in the development of new applications, databases or systems operations (i.e. computer systems or networks).

- Guides and manages staff in the development, delivery of direct user service and teaching including providing technology support to students, faculty and staff. Advises regarding faculty and student needs for classroom instructional technology access.

- Directs staff activities in reviewing and maintaining the operating system and the administration, development or enhancement of various applications programs, operating systems, or network systems.

- Develops annual employee mentoring and work plans. Coordinates staff technical training. Makes hiring decisions, evaluates performance, provides staff feedback and administers corrective action when necessary.
• Reviews output, project reports, systems documentation, service requests, and other information to evaluate systems performance, systems operations, requirements for new applications; systems upgrades, application upgrades.

• Develops and implements standards, policies and procedures related to user support, consulting practices, network hardware and software acquisition, use, support, security, and backup, updates and research and development.

• Serves as primary spokesperson for information management; negotiates contracts and services, by coordinating activities of hardware, software, telecommunications, support, and training with external vendors, service providers, government agencies as well as cross IT and UA departments and campuses.

• Serves as a strategic advisor to executive and senior level managerial staff with authority independently to commit the organization to mission critical projects or expenditures.

LEVELS AND COMPETENCIES
The primary distinction between levels is reflected in the Level Descriptors. As levels increase, scope, complexity and degree of independence increase. Higher levels may perform duties of lower levels. Education and experience are stated at the minimum threshold for the level. Additional education or experience may be desirable for some positions.

Level 1
PCLS: 02021

Descriptors
Works under administrative supervision. Directs and coordinates units, shifts or functions involved in computer operations, user support or network operations. Includes limited maintenance, database operations, system and application monitoring. Responsible for comprehensive program support, help desk training, and establishment of standards.

Knowledge, Skills and Abilities
Demonstrated knowledge of computer operations, maintenance and telecommunications networks operations and maintenance; of data processing hardware and software functions, capabilities and interrelationships; of developing and adhering to institutional standards and procedures; of administrative policies and practices; of security practices and control methods and systems; of design specifications for application program systems; of system design and development procedures; documentation standards for information technology, planning techniques, of user support procedures and systems and of supervisory principles and practices.

Ability to direct the work of others, to coordinate activities and resources within or between units; to assess and evaluate and make recommendations on the performance of computer operating
systems maintenance procedures and user support practices; to communicate effectively; and to establish and maintain professional working relationships with others.

Level 2
PCLS: 02022

Descriptors
Works under general direction. Directs and coordinates computer operating system units, programs or projects and professional and technical staff in designing and developing applications systems, data bases, operating systems, computer networks maintenance plans and other requirements that are directly related to the computer systems and network infrastructure and various programs and other software or hardware required for a computer operating and network systems.

Knowledge, Skills and Abilities
Ability to do research, operational analysis, development of statistical models/norms, reports, and programming, data base management and major systems operations and administration as well as network design.

Level 3
PCLS: 02023

Descriptors
Works under long-range administrative direction. Directs and plans activities and functions involving multiple operations, programs or projects. May direct lower level managers, and staff in developing and implementing various computer systems, network systems and operating programs. This includes the integration of various related functions across organizational and functional lines, that is enterprise level. Responsible for research and development efforts directed toward enterprise operating systems, applications, database integration and other related activities.

Knowledge, Skills and Abilities
Demonstrated knowledge of multiple communication software systems and networking technology; network engineering of custom systems. Ability to supervise administrative and technical staff involving engineering and software technical knowledge. May require scientific knowledge. Demonstrated ability to plan and direct work related to the development of computer operating systems, maintenance procedures, applications systems, network systems and other related requirements such as data base management and security, research and development or integration or applications and new technologies, that is, convergence.
Level 4
PCLS: 02024

Descriptors
Works under long-range administrative direction. Directs a large management information program or operating system involving multiple operations, programs or projects and directing lower level managers and staff in developing and implementing various computer systems, network systems and operating programs. This includes programs or systems involving University wide use and application or covering a large variety of functions and operations, in addition to Level 3 responsibilities. May serve as a strategic advisor with full authority independently to commit the agency to major expenditures and obligations.

Knowledge, Skills and Abilities
Requires knowledge, skills and abilities identified in Levels 1 - 3, plus demonstrated ability to direct and coordinate activities involving multiple work units or sections and to plan, assess and implement major information systems and advanced technology including upgrades of stated systems and applications. Ability to direct a large management information program or operating system involving multiple operations, programs or projects. Ability to supervise which may include other managers and staff or may advise University authorities for highly significant mission critical programs with full authority independently to commit the agency to major expenditures and obligations.

Education and Experience
Levels 1 through 4 require experience in computer or network operations, maintenance, production control, programming or computer analysis, experience as a supervisor, team leader, project manager or program planner, evaluator, or advisor to senior management. Academic training in computer science, scientific or academic disciplines related to the specific assignment or management information systems course work involving the skills required may substitute for technical experience.