



## **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. Positions in Information Systems job families are responsible for following procedures, protocols, processes and regulations set forth in University of Alaska Board of Regents Policy and Regulation (02.07 – Information Resources). It is distinguished from supervisory levels 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. Primary responsibilities do not include Information Systems Professional duties. IS professional functions may be performed but not as the primary focus of this position.

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
- Supervise staff
- Plan for budgeting needs
- Monitor fiscal activities
- Oversee purchasing
- Evaluate high-level services and programs
- Serve as strategic advisor and liaison

Positions in this family fall into broad categories: **Operations, Systems, User Support, and 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, database 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

*The typical functions listed are typical examples of work performed by positions in this job classification. Not all functions assigned to every position are included, nor is it expected that all positions will be assigned every typical function.*

- Meet 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.
- Evaluate systems; project needs for upgrading hardware or software; work with product development, sales, and marketing to discern competitiveness of new technologies; make recommendations concerning the selection and purchase of equipment, vendor products or services; develop budgets and monitor expenditures.
- Consult with users to identify data processing requirements; set priorities; direct assigned staff in the development of new applications, databases or systems operations (i.e. computer systems or networks). Use and advocate project management best practices. Effectively coordinate projects and services across multiple functional area boundaries.
- Guide and manage staff in the development and delivery of direct user service and teaching, including providing technology support to students, faculty and staff. Use and advocate IT Service Management industry best practices and service management frameworks. Advise other managers regarding faculty and student needs for classroom instructional technology access.
- Collect, analyze and report metrics that support data driven decision making.
- Direct staff activities in reviewing and maintaining the operating system and the administration, development or enhancement of various applications programs, operating systems, or network systems.
- Develop annual employee mentoring and work plans. Coordinate staff technical training. Make hiring decisions, evaluate performance, provide staff feedback and administer corrective action when necessary.



- Review output, project reports, systems documentation, service requests, and other information to evaluate systems performance, systems operations, and requirements for new applications, systems upgrades and/or application upgrades.
- Develop and implement 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.
- Serve as primary spokesperson for information management; negotiate contracts and services, by coordinating activities of hardware, software, telecommunications, support, and training with external vendors, service providers, and government agencies as well as cross IT and UA departments and campuses.
- Serve as a strategic advisor to executive and senior level managerial staff with authority to independently 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**

**Grade 80**  
**Exempt**

#### ***Descriptors***

Work is performed under general direction. Direct and coordinate units, shifts or functions involved in computer operations, user support or network operations. Perform 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; of 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 and 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.

#### ***Education and Experience***

Bachelor's degree in a relevant field (i.e. Information Technology or other related field) and 3 years progressively responsible experience, or an equivalent combination of training and experience.

**Level 2**  
**PCLS: 02022**

**Grade 81**  
**Exempt**

***Descriptors***

Work is performed under general direction. Direct and coordinate computer operating system units, programs or projects and professional and technical staff in designing and developing applications systems, databases, 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. This level is distinguished from the lower level by managing a moderately large or complex unit function within this specialized area.

***Knowledge, Skills and Abilities***

Same as level one, plus: Ability to perform research, create operational analysis and reports, develop statistical models/norms. Ability to perform programming, database management and major systems operations and administration as well as network design.

***Education and Experience***

Bachelor's degree in a relevant field (i.e. Information Technology or other related field) and 5 years progressively responsible experience, or an equivalent combination of training and experience.

**Level 3**  
**PCLS: 02023**

**Grade 83**  
**Exempt**

***Descriptors***

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

***Knowledge, Skills and Abilities***

Same as level two, plus: Demonstrated knowledge of multiple communication software systems and networking technology; network engineering of custom systems. Knowledge of a scientific discipline may be required. Ability to supervise\*\* administrative and technical staff involving engineering and software technical 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 database management and security, research and development or integration or applications and new technologies, that is, convergence.



***Education and Experience***

Master's degree in a relevant field (i.e. Information Technology or other related field) and 5 years progressively responsible experience, or an equivalent combination of training and experience.

**Level 4**

**PCLS: 02024**

**Grade 84  
Exempt**

***Descriptors***

Work is performed under long-range administrative direction. Direct a large management information program or operating system involving multiple operations, programs or projects OR direct 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 variety of functions and operations large in scope\* and complexity\*. May serve as a strategic advisor with full authority independently to commit the agency to major expenditures and obligations.

***Knowledge, Skills and Abilities***

Same as level three, 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\*\* other managers and staff. Ability to advise University authorities regarding highly significant mission critical programs.

***Education and Experience***

Master's degree in a relevant field (i.e. Information Technology or other related field) and 7 years progressively responsible experience, or an equivalent combination of training and experience



\* **Complexity:** Complexity increases as projects impact more users, critical systems, major workgroups, multiple functional areas, multiple departments, the MAU or the system. Complexity also increases as projects change how the mission is accomplished, integrate new technology, change operations, are more high risk or have higher impact. Complexity increases as positions supervise more diverse functional areas which require increased breadth and/or depth of knowledge. Complexity also increases as decisions made commit the University to major obligations and expenditures.

\* **Scope:** Refers to the impact the Information Systems program, project or task has on the unit/department, MAU or system. Scope also refers to the impact of recommendations or decisions a position has on programs and policies for the unit/department, MAU or system.

\*\* **Lead:** Provide day-to-day guidance, training and direction for staff in addition to other duties. Regularly assign and review work. Is fluent in assigned area of responsibility.

\*\* **Supervise:** Hire, train, evaluate performance and initiate corrective action.

[2013 revisions include formatting for consistency and suggestions submitted by work team committee. Revisions were also posted for employee review and comment. ]