Classification and Qualification

Information Technology Series
Information Technology Consultant

CLASSIFICATION OVERVIEW

Positions in this classification have varying levels of responsibility for direct consultative support and training to students, staff, and faculty on information technology-based systems primarily in the areas of applications software, multimedia, database resources, and network support, but may include a moderate degree of hardware consultation and support. Positions in this classification may have responsibility for supporting academic or administrative departments, lab and/or classroom needs, using available information technologies and resources. The Information Technology Consultant typically has a broad knowledge of multiple software and instructional/media technology applications, database systems and sources, and equipment types, but is not usually involved in design and systems analysis on an ongoing basis which would require an in-depth knowledge of engineering or programming techniques.

Positions in this classification may reside in administrative or academic departments as well as within centralized information technology or academic computing departments. Common working titles may include: Computing Consultant, User Consultant, User Support Representative, Lab Manager, Instructional Designer/Technologist, Instructional Computing Coordinator, Multimedia Specialist, etc.

ENTRY QUALIFICATIONS

To enter this classification, a basic foundation of knowledge and skills in technical information systems and application program packages is a prerequisite. This foundation would normally be obtained through a bachelor's degree in computer science, information systems, educational technology, communications, or related fields, or similar certified coursework in applicable fields of study. Foundation knowledge and skills for the Information Technology Consultant, depending on the nature of the position assignment, may include working knowledge of common software application packages, equipment platforms, reference database systems and sources, and training methods and a basic understanding of networks, data communication, and multimedia systems.

Further progress within this classification is based on department need and work assignments requiring higher levels of skills and knowledge. *Reference the Information Technology Series Introduction for level definitions.*

CORE FUNCTIONS

The core functions of the Information Technology Consultant are:

- User Consultation
- Site Administration
- Instructional/Multimedia Development

These core functions represent major categories of work within the Information Technology Consultant classification. Typical activities and core skills for each core function cited below are illustrative; campus assignments may vary.

CORE FUNCTION
User Consultation

Examples of Typical Activities:

User Support:
Provide consultative support and services to the user community to ensure problem resolution, system/data access, and optimal system performance. Examples of typical work activities include:
- Provide telephone or on-site support;
- Assist users to develop or use applications and software packages and their features;
- Install, configure, and modify applications, networks, databases, and other systems;
- Provide academic course management and related services to faculty;
- Act as a liaison and interface between faculty, staff, and information systems resources and staff.

Resource Evaluation and Needs Analysis:
Provide technical advice and expertise in the evaluation, purchase, upgrading, and maintenance of software and/or hardware resources. Examples of work activities include:
- Advise and assist faculty, staff, and students in the selection of available software, hardware and/or database systems, and sources to meet their needs;
- Research available products and systems and recommend alternatives to meet identified needs;
- Participate in needs assessments and evaluate potential purchases for compatibility with existing systems;
- Specify maintenance contracts;
- Prepare requests for proposals, cost estimates, and justifications.

Data Administration and Support:
Administer databases and ensure that data sources are accurate and readily accessible to the user community. Examples of work activities include:
- Develop assigned databases using database management packages/systems;
- Develop and administer data policies, procedures and standards;
- Analyze and define data requirements;
- Maintain database archives by acquiring/installing data sets and documentation;
- Assist in data transfers and file sharing via utility programs; Monitor, analyze, and verify data to ensure integrity;
- Develop policies and procedures for access to remote resources and provide access to these resources.

Training:
Provide training and communication materials to users that maximize their ability to utilize system capabilities, features, and other resources. Examples of work activities include:
- Develop and/or conduct formal training programs, lab/equipment orientations and demonstrations, and self-guided tutorials on equipment, applications, databases, and related systems.
- Write user documentation, user guides, instructor guides, training outlines, and technical training publications;
- Assess campus training needs and develop and coordinate plans for training delivery.

CORE SKILLS
User Consultation

- Ability to apply consultative skills to assess user needs and provide appropriate support.
- Knowledge of information technology systems and/or applications, including campuswide systems and multimedia environments, access procedures, networks, and/or databases.
- Ability to integrate multiple applications and/or systems.
- Proficiency using standard software packages.
- Ability to analyze data requirements and research data availability and access methods.
- Knowledge of data administration principles and techniques.
- Knowledge of network administration.
- Ability to coordinate and implement data exchanges and conversions.
- Knowledge of training theory and practices demonstrated by an ability to develop and deliver technical training and user documentation.
- Demonstrated interpersonal and communication skills in working with users to interpret needs and provide appropriate solutions.
- Knowledge of statistical and/or research databases.
- Subject matter expertise in a specialized discipline or body of knowledge.

CORE FUNCTION
Site Administration

Examples of Typical Activities:

Site Operation:
Ensure lab, studio, classroom, and/or stand-alone information systems are fully operational and secure. Examples of work activities include:
- Analyze and monitor system performance and usage;
- Coordinate multimedia components for lab or classroom use;
- Coordinate lab or media studio operations and projects;
- Schedule facility use and ensure appropriate staffing;
- Monitor facilities software and media libraries and inventories;
- Establish facility security and operational policies and procedures.

Site System Maintenance:
Ensure proper maintenance and support of assigned lab/ classroom/stand-alone systems. Examples of work activities include:
- Use utility and file programs to recover and back up data;
- Re-install damaged or deleted software;
- Troubleshoot errors in system operation and initiate repairs;
- Configure media components and/or local area networks (LANS);
- Administer site LAN including maintenance of related hardware and software;
- Maintain file/network servers and all lab stations.

CORE SKILLS

Site Administration
- Ability to identify, develop, and coordinate plans for use of site resources (e.g., staffing budget, and materials) and to define site procedures for ongoing administration and maintenance.
- Ability to maintain materials, inventory, and technical references and administer facility and system security practices.
- Knowledge of system utilities, features, installation and maintenance procedures, and general operation.
- Basic knowledge of data and file structures, database systems and related utilities, operating systems, and communication interface programs.
- Ability to perform system, database, and network maintenance tasks and to use standard software packages.
- Knowledge of local area network system configuration, protocols, and/or transmission media.
- Ability to analyze and troubleshoot system connection and interface malfunctions.
- General knowledge of operating systems and hardware for problem identification and analysis.
- Knowledge of copyright laws and industry standards.
- Demonstrated ability to assist others in completing work assignments including the ability to provide basic work direction and training.

CORE FUNCTION
Instructional/Multimedia Development

Examples of Typical Activities:

Instructional Design:
Develop instructional and/or research techniques and applications using technology to enhance and facilitate academic and educational objectives. Examples of work activities include:
- Devise methods for integrating technical tools and applications into faculty instructional delivery and student projects;
- Develop models and prototypes for research projects using appropriate software packages, utilities, and product features;
- Develop courseware and curriculum software tools;
- Aid faculty in researching computing and media software materials;
- Conduct needs analysis and monitor instructional/research needs on campus; conduct research and prepare technical justification for grants.

Multimedia Origination:
Create multimedia programs that meet academic and administrative goals. Examples of work activities include:
- Develop and execute multimedia presentation proposals that incorporate all technical and media elements;
- Develop detailed production plans for multimedia projects including staff, budget, facility contracted services, and production schedules;
- Develop multimedia and/or computer-based interactive instructional applications and materials that include such elements as moving video, sound, computer animation, and text for faculty use in classrooms and teleclassrooms;
- Function as a producer and director for multimedia projects ensuring coordination of all media and technical elements including narration, computer graphics, audio and visual effects, recording, mixing, and transmission as appropriate to the project.

CORE SKILLS
Instructional/Multimedia Development

- Knowledge of instructional design theories and methodologies and ability to apply them.
- Knowledge of database sources and large-scale computing and information resource networks.
- Knowledge of and ability to evaluate instructional software, courseware development, and multimedia applications.
- Ability to perform research design using statistical methodology and application resources.
- Knowledge of systems design and technology integration techniques.
- Ability to provide software development and programming support for instructional applications.
- Knowledge of user interface design principles and applications.
- Ability to develop and create multimedia/video productions.
- Demonstrated ability to work and communicate with users to effectively identify and efficiently meet their requirements.
- Ability to design, develop, and implement instructional applications.
- Subject matter expertise in a specialized discipline or body of knowledge.