TECHNOLOGY SYSTEMS DEVELOPER I

DEFINITION

Under general supervision, translates program specifications into command instructions and options for information systems and develops/modifies databases maintenance as required; and performs related work as required.

EXPERIENCE AND TRAINING REQUIREMENTS

A bachelor’s degree from an accredited college or university in computer information systems, geographic information systems or a closely related field; OR two years of full-time programming experience using languages or automating databases similar to those at Washoe County and working with information systems; OR an equivalent combination of education and experience.

LICENSE OR CERTIFICATE

N/A

DISTINGUISHING CHARACTERISTICS

The Technology Systems Developer I is the entry level in the class series. Incumbents of this class spend the majority of their time writing a variety of computer programs and developing/modifying and maintaining databases. This class provides for a GIS option in which incumbents would be required to perform specialized duties related to that option. This class also allows for additional specialized experience and training requirements based on the area of assignment. This classification is distinguished from the Technology Systems Developer II in that the latter is responsible for a balanced workload of programming and systems analysis and performing a broader range of assignments on a more independent basis. This is the entry-level class in the Technology Systems Developer class series that provides for progression to the next level in the series upon meeting the requirements of the class and recommendation of the appointing authority.

SUPERVISION EXERCISED

N/A

EXAMPLES OF DUTIES (The following is used as a partial description and is not restrictive as to duties required.)

Analyze program specifications, flow charts and decision tables to develop a sequence of coded instructions to create and update efficient computer programs.

Prepare flow charts and diagrams by examining or investigating work processes in order to establish a logical sequence of computer processing steps, database design or application interface; conduct testing to ensure consistency and quality of applications; identify problems and develop programming alternatives.

Develop written operating procedures to be used by users to run new computer programs and train staff responsible for database automation tasks.
Instruct users in the use of new programs and develop final program changes, documentation and procedure manuals; review database automation and maintenance performed by project staff to ensure adherence to quality standards and avoid duplication of data.

Create, convert and modify databases using appropriate database language that includes interfaces with other systems.

Receive training in and assist with systems analysis in order to respond to user needs and implement new technology.

Attend team meetings in order to assist with the installation of new technology and contribute to the implementation of major projects and serve as an information resource to other staff.

**GIS Option:**

Analyze program specifications, flow charts and decision tables and develop a sequence of coded instructions to create and update efficient computer programs including advanced processing functions using established Geographic Information System commands and other software.

Develop written operating procedures to be used by users to run new applications and train staff responsible for mapping automation in the use of computer hardware and GIS software.

Design and develop methods that allow existing databases in other systems to interface with the GIS database.

Create spatial overlays and compose plots by combining information from a variety of existing data layers utilizing programming languages.

**JOB RELATED AND ESSENTIAL QUALIFICATIONS**

**Full Performance** *(These may be acquired on the job and are needed to perform the work assigned.)*

**Knowledge of:**
Operating methods and procedures for Washoe County’s information technology equipment, including methods used in the development of computer programs, documentation and procedure manuals.

Databases and database software used in Washoe County.

Departmental/division policies and procedures.

**Ability to:**
Perform the full range of programming and database modification jobs and assignments.

Instruct users in the use of data and software.

**GIS Option:**

**Knowledge of:**
Use of Geographic Information System for County applications.

**Ability to:**
Perform full range of GIS mapping jobs and assignments.

**Entry Level** *(Applicants will be screened for possession of these through written, oral, performance, or other evaluation methods.)*

**Knowledge of:**
Programming languages used in Washoe County.
Computer programming and documentation techniques.

General knowledge of database software.

**Ability to:**
Analyze problems, develop solutions or recommendations, and oversee correction within assigned specialty.

Plan and organize work in order to set priorities and deadlines.

Prepare and test computer programs.

Use computer hardware, software and peripherals.

Prepare program documentation and operating procedures manuals.

Communicate effectively both orally and in writing.

Prepare, instruct, or present detailed oral and written reports.

Interpret and apply regulations, policies and procedures.

Maintain effective working relationships with department staff and representatives of other departments.

**GIS Option:**

**Knowledge of:**
General knowledge of database software, design principles, and GIS systems.

Computer programming, documentation techniques and principles and practices of cartography.

**SPECIAL REQUIREMENTS**

*Essential duties require the following physical skills and work environment.*

Ability to sit for extended periods. Ability to frequently stand, walk, stoop, and kneel. Ability to use data processing and associated equipment. Ability to work in an environment with controlled temperatures.

This class specification is used for classification, recruitment and examination purposes. It is not to be considered a substitute for work performance standards.