## **CLASS TITLE: SOFTWARE ENGINEER**

**PURPOSE OF THE CLASSIFICATION:** Under direction performs systems analysis and design, analyzes business processes for the availability of system support and design, programming, and maintenance support of applications, testing and packaging for internal and external customers, and performs other related assigned duties.

## **ESSENTIAL TASKS:**

- Analyzes evaluates, conceptualizes, and designs new and modified computer applications/systems, of moderate size and significant complexity, to provide business, scientific, and/or engineering needs and solutions
- Conducts feasibility studies, including evaluation of alternatives, predicting impact on user's needs and data processing resources
- Performs complex programming and systems analysis and design
- Ability to work and train on version control
- Investigates, monitors, and recommends solutions to system problems
- Trains management and users on system use and valid use of information for reports and planning
- Helps in developing bid specs, project charters, and purchase plans
- Acts as lead over other staff when necessary
- Must report to work on a regular and timely basis

Reasonable accommodations may be made to enable individuals with disabilities to perform the essential tasks.

## QUALIFICATIONS:

<u>Training and Experience</u>: Graduation from an accredited college or university with a bachelor's degree in computer sciences, industrial engineering, mathematics, electronics technology, accounting, business administration, statistics or other related fields, including or supplemented by advanced coursework in computer sciences; and four (4) years of experience in business systems, systems analysis and/or computer programming; or an equivalent combination of training and experience per Personnel Policies and Procedures, Section 128. Refer to the Computer Programmer/Systems Analyst Progression Criterion Document for additional requirements.

Knowledge, Abilities and Skills: Comprehensive knowledge of methods, procedures, and techniques used in systems analysis and design and programming; considerable knowledge of business and/or organizational systems with an emphasis on statistics, planning, procedures, training and motivation; and good knowledge of state-of-the-art data processing and data communication technology and its application. Good knowledge of at least four recognized computer languages, with the ability to program in two. Considerable ability to oversee server-side processes, server development, and server management. Knowledge in web areas including but not limited to NET, SharePoint or JavaScript. Ability to implement and design in web areas such as those previously mentioned. Ability to work independently and to recognize, analyze, and solve complex programming problems; ability to analyze issues and to formulate sound concepts; ability to train others in basic programming work or related activities; ability to effectively communicate both verbally and in writing; ability to create and conduct technical presentations; and the ability to utilize the highest level of interpersonal skill in order to understand, select, develop and motivate people at any level within or outside the organization.

<u>Physical Requirements:</u> Physical requirements include arm and hand steadiness and finger dexterity enough to use a keyboard and telephone; occasional lifting up to 50 pounds; occasional carrying up to 20 pounds; may be subject to walking or sitting for extended periods of time, standing, reaching, handling, twisting, and climbing; and vision, speech, and hearing sufficient to perform the essential tasks.

<u>Licenses and Certificates:</u> Possession of a valid Oklahoma Class "D" Driver's License.

**WORKING ENVIRONMENT:** Working environment is primarily indoors, with some traveling to various City locations to provide computer-related assistance.

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Class Code: 3014 EEO Code: N-02 Pay Code: IT-40

**Group: Clerical and Administrative Series: Data Processing and Information Services** 

Effective Date: June 11, 2018