FRESNO UNIFIED SCHOOL DISTRICT
Position Description

TITLE: Software Engineer
REPORTS TO: Assigned Supervisor

DEPARTMENT: Assigned Department
CLASSIFICATION: Classified

FLSA: Non-Exempt
WORK YEAR: Varies

BOARD APPROVAL: March 24, 2010
SALARY: G-59/CSEA125 Salary Schedule

(Former Classification: Information Systems Analyst (IT Svcs))

BASIC FUNCTION:

Under general direction of an assigned supervisor, performs activities required to analyze, design, develop, implement, install, support, maintain, patch, troubleshoot, and upgrade software on specific operating systems, utilities, and enterprise applications to provide reasonable, timely delivery of professional technology services to the District in support of student learning at a high level; lead other programming staff on major projects and serve as a technical resource to others to support the effective and efficient operations of the department.

REPRESENTATIVE DUTIES: (Incumbents may perform any combination of the essential functions shown below. This position description is not intended to be an exhaustive list of all duties, knowledge, or abilities associated with this classification, but is intended to accurately reflect the principal job elements.)

Lead and coordinate the efforts of other programming staff in projects as assigned; delegate tasks and provide clear instruction to other staff as assigned; serve as the project leader for major complex projects to support the effective and efficient operation of the department. E

Develop and write computer programs to streamline processes and procedures using existing, modified or new software and programming languages to provide efficiency for sites/departments. E

Respond in a reasonable, timely manner to technical questions from staff and users regarding the use of hardware and software; provide solutions and recommendations to resolve issues to meet the needs of students and staff. E

Install, patch and maintain computer operating systems, programs, and general purpose utilities related to assigned duties in a reasonable, timely manner to meet the needs of students and staff. E

Perform research and analyze data utilizing computer data base management programs and spreadsheet programs to ensure data accuracy; coordinate the collection and preparation of data through computer-generated reports. E

Evaluate user needs; analyze administrative, educational or financial activities and perform feasibility studies to determine users’ needs and resolve operating problems; develop programs and procedures or identify potential purchased software to comply with needed requirements in support of providing students and staff access to high quality technical support. E

Provide training and clear directions to staff and users; prepare and instruct in-service sessions regarding use of computer hardware and software programs to better provide technical support to sites/departments. E

De-bug production errors reported by users and make appropriate corrections to ensure proper operation; discuss user problems and test possible solutions, contacting software vendors as necessary to troubleshoot problems and resolve issues. E

Develop, design, write and present system proposals, as well as detailed specifications according to District needs from user input; add, update, and modify project information on the IT Department’s standard project planning tool and software. E

Prepare written technical documentation, training material, standards, reports, and other documents as assigned.
Gather, analyze and compile data on assigned topics to ensure accuracy of information; research and review a variety of sources to provide reports including applicable legal/mandated provisions.

Learn new operating systems, utilities and languages, and remain current with computer technologies.

Develop controls and testing procedures to ensure accuracy and auditability of implemented systems.

Maintain contact on a regular basis with users to ensure implementation and maintenance of systems.

Perform related duties as assigned.

**EDUCATION AND EXPERIENCE**

Any combination equivalent to: bachelor’s degree in information systems, computer science, or related field and seven years of professional experience in position related to job duties; supplemental course work or experience in the training, programming, use, and installation of personal computer hardware and software preferred.

**LICENSES AND OTHER REQUIREMENTS:**

Valid California driver's license; Microsoft Certified Technical Specialist (MCTS) or Microsoft Certified Application Developer (MCAD) or equivalent or ability to obtain within one year.

Special Requirement:
This position may work additional assignments including evenings and weekends to accommodate testing, support, maintenance and potential call back duty responsibilities.

**KNOWLEDGE AND ABILITIES:**

**KNOWLEDGE OF:**
Principles and practices of training and staff development.
Applicable computer language, programming environments, and operating systems.
Systems and procedures analysis and development.
Project and program planning techniques, scheduling and control.
Methods and processes of statistical analyses and data reporting.
Personal computer hardware and software including Windows and scripting languages.
Capabilities, operation and utilization of personal computers, related equipment and software.
Management information systems.
Requirements and restrictions of data base concepts.
Technical aspects of field of specialty.
Accurate record-keeping techniques.
Interpersonal skills using tact, patience and courtesy.
Oral and written communication skills.
Spreadsheet and word processing systems
Correct English usage, grammar, spelling, punctuation and vocabulary.

**ABILITY TO:**
Perform systems analysis including the development of cost efficient, auditable and secure systems.
Learn and use new program languages and operating systems.
Analyze and resolve technical problems.
Evaluate and prepare reports on new computer software and hardware.
Diagnose personal computer hardware and software.
Install and operate various computer hardware and software applications related to assigned duties.
Prepare comprehensive technical materials.
Prepare and present complete and accurate written and verbal reports.
Establish and maintain cooperative and effective working relationships with a diverse range of people.
Work independently with little direction.
Design forms, develop testing techniques and test computer programs and systems.
Assist users in determining their needs.
Lead major complex programming projects.
Train and provide clear work direction to assigned personnel.
Communicate, understand and follow both oral and written directions effectively.
Plan, prioritize and schedule work to meet schedules and timelines.
Communicate using patience and courtesy in a manner that reflects positively on the organization.
Actively participate in meeting District goals and outcomes.
Apply integrity and trust in all situations.
Learn District organization, operations, policies, objectives and goals.

WORKING CONDITIONS:

ENVIRONMENT:
Office environment, fast paced work; constant interruptions; extended viewing of computer monitor; contact with dissatisfied individuals.

PHYSICAL ABILITIES:
With reasonable accommodations, if necessary, dexterity to operate a computer and other office equipment; seeing to view monitors; hearing and speaking to exchange information and make presentations; lifting moderately heavy objects; sitting or standing for extended periods of time; reaching overhead, above the shoulders and horizontally, kneeling, crouching or bending at the waist to retrieve or store files and equipment.

Fresno Unified School District is an Equal Opportunity Employer and reasonable accommodations are made under the American with Disabilities Act as required by law.

\[E=\text{Essential Functions}\]