

## **YUBA COMMUNITY COLLEGE DISTRICT**

### **CLASS TITLE: PROGRAMMER/ANALYST II**

#### **BASIC FUNCTION:**

Under the direction of the designated supervisor, perform varied programming and operations tasks in accordance with standards and established procedures. Meet with system users to identify program requirements and develop specifications. Write programs in Unibasic, Envision, and Crystal Analysis. Develop data views and reports using the views as data sources. Learn the key processes and functions of one or more departments, in order to provide high quality support to the department's users through configuration, operation, program modification, and problem resolution related to administrative software used by the college.

#### **DISTINGUISHING CHARACTERISTICS:**

The Programmer I classification provides basic support to the administrative computing system. Incumbents may also provide assistance to users. Incumbents assigned to the classification of Programmer/Analyst II provide more complex support to various users through configuration, operation, program modification and problem resolution. The Senior Systems Analyst classification provides leadership to all phases of systems software and hardware planning, maintenance, security and operation. The incumbents assigned to the Senior Systems Analyst classification perform difficult systems software analysis and security planning. The Senior Software Specialist classification provides difficult systems analysis, development and implementation tasks. The

incumbents assigned to the Senior Software Specialist classification have the breadth and depth of knowledge to resolve the most complex application development.

#### **REPRESENTATIVE DUTIES:**

Design and develop/modify complex computer application programs and databases using a variety of 3rd and 4th generation programming languages including, but not limited to, Unidata Envision, Unidata Basic, Seagate Analysis and SAS. (E)

Perform analysis for program modification requests and for new program requests. (E)

Analyze and resolve or recommend solutions for technical problems that require advanced knowledge of software applications. (E)

Install, configure, and test new/modified administrative software on administrative system minicomputer. (E)

Create program documentation and update existing documentation as the program application changes. (E)

Extract and report requested information according to District, user and governmental needs and requirements; meet with users to discuss and assess needs. (E)

Create views and data stores from the college administrative database for use in end-user report applications. (E)

Provide support to data processing technician and Programmer I. (E)

Provide technical assistance to users with respect to administrative computerized processes. (E)

Develop/deploy on-line procedural guides for end user processes utilizing administrative applications software. (E)

Remain current on the development in information technology concepts, tools, techniques, and applications. (E)

Maintain a record of work requests and completed tasks. (E)

Other related duties as assigned. (E)

**KNOWLEDGE OF:**

Operating system commands and system functions that support program development and maintenance.

Intermediate analysis of problems, researching connection between user activity, data combinations, and program functions and processes that produce inaccurate or undesirable results, to develop and test solutions to user problems.

Data warehouse concepts including extraction and cleaning of data, structuring data for ease of analysis, and development of reports and OLAP cubes in support of business processes.

Computer hardware and software concepts, systems, and procedures, including UNIX based enterprise servers and microcomputers with a variety of operating systems (e.g. Windows NT, 2000).

Computer application programs, including word processors, spreadsheets, graphics programs, and desktop publishing programs, HTML authoring tools and techniques.

Computer local area network (LAN) concepts; delivering administrative application functionality in a networked environment.

Internet applications (such as email, web browsers, network news, and FTP).

Oral and written communications skills.

Interpersonal skills including tact, patience and courtesy.

Program and operational documentation.

Modern principles, practices and techniques of program design, development, testing, deployment and operation.

Recent computer programming languages (for example, Colleague, Visual Basic, C, Java and UNIX shell scripting languages).

Relational database concepts, tools, and techniques including the use of Structured Query Language (SQL), and ODBC.

**ABILITY TO:**

Learn the business processes of the college supported by the administrative computer applications, including admissions, registration, records, curriculum and scheduling, student accounts receivable, human resources, payroll and financial systems.

Analyze the requirements of user departments to develop written statements of programming requirements.

Research and test application configuration options that will more fully support the operational needs of the college administrative software users.

Learn District organization, objectives, policies, and operations.

Apply modern principles and techniques of computer system development to specific user needs and problems.

Use designated computer programming and database query languages, learning new ones as necessary.

Analyze system and program structures and data flows to isolate and remedy logic and coding errors.

Research anomalies or errors in application functions to discover configuration, usage, or programming problems and develop recommendations for resolution.

Work with user departments to develop written descriptions of requirements for application functions.

Establish and maintain cooperative and effective working relationships with others.

Extract, clean and format data for use in a data warehouse, including the development of complex data views.

Develop complex reports and OLAP cubes for use by district staff.

Use available resources to track problems and opportunities identified by other college administrative software users, to improve the reliability and effectiveness of Yuba College utilization of the application.

Design, develop, implement and use computer databases.

Write clear and concise system and program documentation.

Work effectively with a diverse student/staff population.

#### **EDUCATION AND EXPERIENCE:**

Any combination equivalent to: A Bachelor's degree in computer science or related field and two (2) years of experience in software design, development or maintenance. Work experience in software design, development or maintenance may be substituted for education; i.e., two (2) years of work experience equates to one (1) year of education.

#### **LICENSES AND OTHER REQUIREMENTS:**

Valid driver's license.

#### **ENVIRONMENT:**

Office environment.

#### **PHYSICAL ABILITIES:**

Dexterity of hands and fingers to operate a computer keyboard.

Hearing and speaking to exchange information.

Seeing to view a computer monitor.