

## **IMPERIAL COMMUNITY COLLEGE DISTRICT**

### **CLASS TITLE: SENIOR PROGRAMMER/SYSTEMS ANALYST**

#### **BASIC FUNCTION:**

Under direction of the Area Administrator or assigned supervisor, provide support in analyzing system data and information; determine data integrity, test data accuracy and reliability; develop software applications to provide data analysis functions and reports for institutional use. Design, develop, test and implement system programs and database level language scripts, analyze ERP system(s) for a variety of institutional data processing needs; research, write and maintain end user documentation to support programs and operational/business procedures; instruct ERP system end users on the proper operation of systems, and provide expertise and consultation services to system users.

#### **DISTINGUISHING CHARACTERISTICS:**

The Senior Programmer/Systems Analyst is the advanced-level class of this professional series. Incumbents either perform complex work independently or serve as a project leader for specialized projects and as a Lead Systems Analyst for continuous end user and functional leads support. Assigned projects require advanced-level skills in specialized programming techniques and languages, as well as distinctive data and system analysis proficiency.

#### **REPRESENTATIVE DUTIES:**

- Support the planning and implementation of long-range system goals, and assist in the preparation of proposals for all phase of systems planning, development and implementation.
- Analyze user business processes and design applications/solutions to help streamline operations.
- Define the scope and objectives for applications, along with constrains and system requirements.
- Detect, analyze, and define data needs for various organizations in the college; collect, process, and employ end user inputs, information, or other data to determine ERP system needs and requirements.
- Coordinate and implement data conversion, integration and transitions.
- Coordinate and guide the work of lower level functional users in using applications and provide training if necessary.
- Support college institutional research by providing accurate and appropriate information and data.
- Provide technical assistance in specialized software applications and data analysis.
- Design, program, maintain and debug existing programs and data structures to meet end user needs; provide for proper maintenance of assigned programs; identify increased reporting capability, records maintenance and/or data manipulation requirements.
- Design, program, maintain and analyze new programs, scripts and data structures to accommodate current and future needs; consult with system end users to detect and define existing needs and requirements, propose and discuss alternative approaches, and resolve questions and issues; assure file conversion and cross-operating platform file manipulation as appropriate.

## **SENIOR PROGRAMMER/SYSTEMS ANALYST (Continued Page 2)**

- Write code and modify programs using current programming languages on UNIX and/or Windows Platforms; code and modify UNIX, Windows and DOS based programs/scripts using applicable programming language; code user interface applications for data collection and queries; code analytical and statistical applications; assure data integrity for interdepartmental reporting procedures.
- Test, debug and evaluate ERP system performance; identify and rectify potential program failures.
- Design and maintain database and file structures used by the institution ERP system; establish, link, join and relate data within tables via scripts; maintain flow charts or narrative description of program flow, purpose and operation; examine output data from program operations to verify and assure accuracy and completeness of data.
- Maintain frequent contact with end users from various departments to discuss and analyze ERP system performance and efficiency; consult with end users to discuss desired system data output and user expectations; respond to diverse questions and issues from faculty and staff concerning ERP system processes and business practices.
- Write and maintain ERP system operations documentation for end users and operators and provide training if necessary; assure documentation contains steps to initiate programs and routines to remedy interruptions in program runs.
- Consult with appropriate staff regarding system design, problems and developments and other related matters.
- Provide telephone support, remote assistance, and other help desk functions, to include maintenance of detailed records and reporting of work orders using the institutional work-order management system.
- Maintain system security and protection of confidential information, files, and electronic data.
- Maintain current knowledge of developments, issues and advancements in data processing equipment, software and programming.
- Operate a variety of computer equipment, peripheral devices and test equipment.
- Perform related duties as assigned.

### **ABILITY TO:**

- Perform critical thinking to diagnose the cause of data inaccuracy.
- Perform software development to construct applications to test data integrity and consistency.
- Perform software development to construct interactive or non-interactive applications to correct data inaccuracy and inconsistency.
- Perform software development to generate various critical reports for community college use.
- Perform under short time schedules.
- Maintain comprehensive records and provide proper documentation of the applications developed.
- Develop databases, programs and procedures necessary to integrate and/or implement the ERP system(s).
- Test system fully to determine its operational reliability.
- Demonstrate ability to work with users in identifying their data access/query/reporting needs.

## **SENIOR PROGRAMMER/SYSTEMS ANALYST (Continued Page 3)**

- Perform local problem resolution and/or functional analysis for ERP users.
- Apply a high degree of expertise and advanced knowledge of computer programming techniques to independently analyze, design, develop and maintain effective computer applications which will facilitate and expedite the processing of complex administrative data.
- Analyze system needs for instructional and administrative functions and develop workable automation solutions; consult with end users to define specific coding needs and develop solutions.
- Perform local problem, resolution and/or functional analysis for IVC users.
- Analyze situations accurately and adopt an effective course of action.
- Design and implement system programs/scripts for a variety of college data processing needs including instructional and administrative functions; create and maintain interactive integrated database programs and systems.
- Apply techniques of programming and data structuring/analysis to precise problems or requests.
- Establish and maintain cooperative and effective working relationships with others.
- Provide effective communication and excellent customer service using tact, patience, and courtesy.
- Meet schedules and timelines; effectively plan and organize work.

### **EDUCATION AND EXPERIENCE:**

Bachelor's degree from an accredited college or university with major course work in computer science, information technology or a related field and four years of increasingly responsible experience at the level of a Systems Analyst preferred;

Or

At least two years of related college level course work and four to five years of increasingly responsible experience at the level of a Systems Analyst.

Experience with the Ellucian Banner ERP system or similar is preferred.

### **WORKING CONDITIONS:**

Duties are primarily performed while sitting at a computer or while discussing issues with college personnel in an office or meeting room environment. Incumbents are subject to frequent contact with District and campus staff and administrators and demanding project timelines.

**PHYSICAL DEMANDS:** Incumbents regularly sit for long periods of time, walk short distances on a regular basis, occasionally travel to other offices or locations to attend meetings or pick up and/or deliver materials, use hands and fingers to operate an electronic keyboard or other office machines, speak clearly and distinctly with others; see to read fine print and operate computer; hear and understand voices over telephone and in person; lift, carry, and/or move objects weighing up to 10 pounds.