College of the Redwoods   Position Description

Position: Programmer Analyst	Position Number:
Department:	FSLA: Exempt
Reports to: Director, Institutional Research	Salary Grade: 122

Summary

Performs advanced analysis, development, testing, and documentation of computer systems concentrating on relational databases. Isolates and corrects application errors in a timely manner. Ensures integrity of the database structures. Develops interfaces to external systems.

Essential Duties and Responsibilities

Depending on the area of concentration, incumbents are expected to perform some, not all, of the following duties:

- Ensures that administrative systems such as student databases or those integrated with business packages, provide the services required by the College. Talks to users to determine requirements. Creates new programs and processes or modifies old processes.

- Corrects problems with business and academic applications. Troubleshoots to determine problem, corrects problems and trains users as needed on procedural changes or proper use. Makes sure that any changes to critical areas (funding, budgets, payroll, etc.) are accurate and functioning properly.

- Installs new applications releases. Installs software in testing environment. Reapplies in-house applications modifications. Performs initial testing before releasing version to users in test environment. Corrects any discovered defects. Applies new release to the production environment when user testing is completed. Assists the Manager in determining local changes. Aids in installation of final upgrade.

- Designs, develops and tests computer applications, systems and files to meet users needs. Works directly with users to determine current and future program needs and design/develop programs to meet those needs. Tests programs, fine tunes based on test results and implements. Develops user documentation.

- Troubleshoots application errors or applications not operating. In conjunction with users, isolates problems from symptoms, determines alternatives and develops and implements resolution. If problem is user error, works with operator to improve user instructions or train for better understanding.

- Manages database table and table space sizes. Tracks the rate of table growth and tablespace sizes. Determines optimum sizes based on growth speed. Compresses tables on a periodic basis.

- Ensures integrity of the database structures. Creates database elements for project development and performance enhancements. Assures data integrity when developing, maintaining or enhancing applications.

- May maintain certain aspects of an inter-office web server. Applies upgrades to web server.

Configures server to function as needed. Creates custom programs to deliver any needed information.

- Creates utilities for technology staff use to enhance department and staff production and processes.

- Provides troubleshooting support for the College's operating system. Diagnoses problems and makes necessary repairs or changes.

- Maintains current technical skills and systems knowledge while learning to use new technologies in a self-directed environment.

- Performs other duties as assigned that support the overall objective of the position.

Qualifications

- **Knowledge and Skills**

Requires thorough knowledge of complex principles and procedures of computer systems, including analysis and design. Requires progressive experience in systems design and development. Requires experience with systems and applications used throughout the College, including data base tools (MS Access and SQL), BASIC programming language (Envision Unibasic preferred), Finance, Payroll and student data applications. Requires problem solving and analytical skills. Requires sufficient communication skills to conduct individual instruction, technical assistance, and apply understandable lines of questioning when trying to understand department needs or problems.

- **Abilities**

Must be able to perform all of the relevant duties of the position with only general supervision. Must be able to operate a variety of computer terminals, printers, and peripheral equipment. Requires the ability to analyze precedented, yet highly technical problems and to develop and apply appropriate solutions. Requires the ability to perform a full range of systems analysis and complex applications programming duties. Must be able to analyze, design, program, install and maintain highly technical and complex systems operations and applications programs. Requires the ability to analyze data and develop logical solutions. Must be able to design and implement computer systems. Requires the ability to discuss technical information with users, discern their needs and develop programs, systems, screens, etc., which meet those needs. Must be able to communicate technical and complex information to 'non-technical' users. Requires the ability to provide training to on-line users in use of computer equipment and operating procedures. Must be able to read, understand and apply information from technical manuals. Must be able to prioritize work in order to meet deadlines and maintain schedules.

- **Physical Abilities**

Position involves light to medium walking, standing, stooping carrying and lifting of light weight materials (under 25 pounds). Requires visual acuity to read numbers, letters, and images; depth perception; hand and finger dexterity to use a keyboard, and hand-eye coordination. Requires speaking and hearing ability sufficient to hear over phone and carry on routine conversations.

- **Education and Experience**

Position requires a combination of education and experience equivalent to an AA degree in a computer science discipline plus six years of experience in applications, database analysis, and operating systems programming; or a BS degree plus two years experience.