Barstow Community College	Position Description
Position: Database Analyst	Salary Grade: 26
Department: IT	FLSA: Non-exempt

Summary

Perform advanced analysis, development, testing, and documentation of computer systems concentrating on administrative and institutional information systems built around 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

- Organizes, leads, and participates in applications development projects for administrative and academic needs. Personally develops and ensures the proper functioning of the most complex applications pertaining to database design and development. Interviews users to determine requirements.

- Creates new relational database programs and processes or modifies existing business practices by coordinating with division/department managers.

- Corrects problems with administrative and institutional 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 are accurate and functioning properly.

- Installs new relational database applications releases. Performs initial testing, utilizing testing environments, before releasing version to users. Corrects any discovered defects. Implements new releases to the production environment when user testing is completed. Assists the Manager in determining local changes.

- 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 files, databases, tables, space, and related allocations. 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.

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

- Participates with others to troubleshoot the College's 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.

- Develops and maintains up-to-date documentation supporting assigned and related areas of responsibility.

- 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 relational database, application system design, analysis, testing, and implementation. Requires progressive knowledge in systems design and development in order to respond to language change and new requirements. Requires specialized knowledge of and skill at applying the principles of program design, coding, testing and implementation. Requires in-depth knowledge of specific programming languages that can be used in a UNIX environment, including but not limited to, C, C++, and COBOL languages, and data base tools and forms such as Oracle PL/SQL. Requires specialized knowledge of custom programming languages used with the District's relational databases. Requires specialized knowledge of multiple finance, payroll, academic support, and student data applications. Requires advanced problem solving and analytical skills to design and troubleshoot programs. 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. Requires the ability to flow chart, organize, and lead development projects. May require the ability to perform work assignments at all College locations.

- **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 Associate degree in a computer science discipline plus six years of experience in applications, database analysis, and operating systems programming. Alternatively, requires a Bachelor's degree plus two years of experience.

- **Licenses and Certificates**

  May require a valid driver's license.

- **Working Conditions**

  Work is performed indoors where minimal safety considerations exist.

This job/class description, describes the general nature of the work performed, representative duties as well as the typical qualifications needed for acceptable performance. It is not intended to be a complete list of all responsibilities, duties, work steps, and skills required of the job.

Board approved: 07/10/2003