



JOB DESCRIPTION

Dept.: Information & Educational Technology,
Applications Services

Working Title: Programmer/ Analyst (215, 216, 217, 218,
219, 220, 300)

Date: March 1998

Job Class: 14 (with Stipend)

PRIMARY FUNCTION:

To provide programming and technical support to develop, maintain, administer and enhance Kwantlen Polytechnic University's information and education systems.

JOB DUTIES AND TASKS:

1. Analyze user requests and conduct business and procedure analysis:
 - a. Consult with and advise clients on their operational and information needs.
 - b. Determine and document client business requirements.
 - c. Provide clients with alternative design solutions and cost estimates on software/hardware and resources.
 - d. Design and develop appropriate computerized technical or procedural solutions to meet client needs.
 - e. Design, develop and document technical design specifications.
 - f. Develop, test and implement new applications and enhancement to existing applications, according to design specifications.
 - g. Prepare and maintain appropriate system and user documentation.
 - h. Train and assist users during the test and implementation phases of application development.
 - i. Provide ongoing application support, including problem resolution and emergency maintenance when required.
2. Perform database administration:
 - a. Perform installation, backup/recovery and upgrades of databases.
 - b. Monitor performance and space utilization of databases, troubleshoot and tune databases when required.
 - c. Design and implement security controls.
3. Perform other related duties:
 - a. Train user support staff members in application troubleshooting techniques.
 - b. Conduct training/information sessions on application systems and software technologies.
 - c. Participate in development projects or troubleshooting sessions as necessary.
 - d. Participate in planning software maintenance releases.
 - e. Evaluate hardware and software tools.
 - f. Contribute to the development of technical standards, guidelines and procedures.
 - g. Communicate with contractors and software vendors as required.
 - h. Assign, monitor and direct other workers.

SUPERVISION RECEIVED:

Reports to Manager, Enterprise Software Support.

SUPERVISION/DIRECTION EXERCISED:

Assign, monitor and direct the work of others.

PHYSICAL ASSETS/INFORMATION MANAGEMENT:

Develop, enhance and maintain information and education systems; manage the integrity, maintenance, access and security of information system databases.

FINANCIAL RESOURCES:

Provide cost estimates of software/hardware and resources in application development projects; select and recommend purchase of software, related document and training materials; sign for and verify receipt of purchases.

The above statement reflects the general details considered necessary to describe and evaluate the principal functions of the job identified, and shall not be construed as a detailed description of all the work requirements that may be inherent in the job.

EMPLOYER REQUIRED KNOWLEDGE, SKILLS AND ABILITIES:

1. Completion of a college diploma or university degree in computing studies or a related field.
2. At least 4 years of programming experience (preferably in a post-secondary environment), including an understanding of data structures, data modelling, operating systems, and synchronization techniques required. This includes:
 - a. Web languages: HTML, CSS, JavaScript, Node.js, React and other web programming languages
 - b. Programming languages: SQL, T-SQL, PL/SQL, Pro*C/C, Java, Shell scripting, Power Shell, .NET
 - c. Databases include: Oracle, MS SQL, MySQL
3. At least 2 years recent experience in developing and supporting Ellucian Post-Secondary Enterprise software (Banner). An equivalent combination of education, training and experience is acceptable.
4. At least 1 year of working experience in BANNER extensibility tools such as Eclipse, Ellucian Page Builder and Theme Editor, along with detailed knowledge to the BANNER database metadata and data structures is essential.
5. At least 2 years recent experience preferred in supporting Microsoft SharePoint. Highly proficient in SharePoint form and workflow development using SharePoint Designer and Microsoft InfoPath. Experience with SharePoint Online and SharePoint 2019 an asset.
6. At least 1 year of work experience preferred in business intelligence, business analytics and report development tools such as Microsoft Power BI, SQL Server Reporting Services (SSRS), SQL Server Integration Services (SSIS), SQL Server Analysis Services (SSAS) and Millennium FAST products.
7. Experience with supporting CRM, specifically GreyMatter and Microsoft Dynamics would be an asset.
8. Be able to demonstrate progressive technical knowledge and knowledge of best practices in information technology service delivery such as SDLC and ITIL and service management applications. Experience in TeamDynamix would be an asset.
9. Fully understand and have worked with sign-on methodologies (such as Ethos, CAS, OpenLDAP, ADFS and Shibboleth) in designing and supporting applications.
10. A high-level understanding of business processes and procedures relating to a post-secondary environment and their inter-relationships as well as an overall knowledge of technical disciplines. Strong design and programming skills are required.
11. Demonstrated working expertise in designing and integrating on premise systems with shared services with cloud technologies.
12. Advanced practical knowledge of security requirements, web services, service-oriented architecture, design patterns, multi-threaded systems, and automated unit testing.
13. Knowledge of modern infrastructures such as storage area networks, virtualization, high availability design, operating systems, network architecture, enterprise network management systems.
14. Require in-depth understanding of the purpose and operations outside own area. Understand internal/external clients; require awareness of external trends, current and emerging technologies and best practices.
15. Ability to demonstrate their ability to recognize problems or situations that are new or without clear precedent and to find corresponding solutions.
16. Ability to find solutions using a systematic, multi-step approach for developing improvements and innovations to enhance performance.
17. Ability to work proactively with minimal supervision, under own initiative.
18. Good verbal and written communication skills, and well-developed leadership skills.
19. Must be willing to work a flexible schedule including occasional evenings and weekends.

Knowledge Skills & Abilities revised: April 5 2022