

PROGRAMMER/ANALYST

DEFINITION

Following software engineering methodology, analyzes administrative and instructional systems and procedures for adaptation to computer information systems, codes, tests, and documents computer programs.

Analyzes instructional and District needs to present information via electronic media, including but not limited to mainframe computers, client-server (i.e. desktop PCs) Internet (i.e. Web design, distance learning), Intranet, and other evolving information-sharing technologies. Designs, develops and implements software solutions to satisfy those needs.

SUPERVISION RECEIVED AND EXERCISED

Supervision is received by Instructional Information Services management personnel.

Provides work direction to lower-level staff. Supervision is exercised over student workers.

EXAMPLES OF DUTIES

Analyzes systems and procedures to refine and convert them to a programmable form for application to software design and development.

Consults with users to determine requirements, data flow, data format, systems controls, and reporting requirements.

Uses software engineering methodology, designs computer information systems and codes original programs, makes modifications to complex programs.

Designs and builds data-sharing interfaces between two or more systems.

Develops tests for systems and reviews the results of testing for accuracy and completeness; makes revisions to eliminate errors and/or to enhance system performance.

Writes documentation for computer information systems and programs.

Designs new forms for data input and output or for the conversion of a manual system to software systems applications.

Designs and builds Graphical User Interfaces (GUIs) for computer information systems and for information-sharing and information presentations.

May develop system run schedules and routines; may evaluate new equipment and software.

Provides technical leadership to a project team.

Assists in design and creation of data storage structures and in maintaining data integrity of all data storage structures.

Designs and creates temporary data structures and print files as needed.

Interfaces with other Information Technology personnel (i.e. network and systems analysts, support) to implement computer information systems and information sharing solutions.

EXAMPLES OF DUTIES (continued)

Investigates project requests and make cost effectiveness and time requirement reports to responsible administrator and project team.

Create and maintains job control/command language files.

Trains Information Technology Support personnel and other College staff as needed in proper use of computer software systems.

Selects, trains, evaluates and maintains schedules of student workers.

Performs related duties as assigned.

QUALIFICATIONS

Knowledge of:

Customer service protocol.

Current methodology of software engineering, including but no limited to, systems design, architecture design, requirement development, high level and detailed design, quality assurance, testing and validating.

Graphical User Interface (GUI) design.

One high level programming language relevant to Glendale Community College.

Operating systems.

Client server architecture.

Ability to:

Apply customer service protocol and maintain a customer service-oriented priority.

Establish and maintain cooperative and effective working relationships with members of the college community and with outside contacts.

Communicate clearly and concisely, both orally and in writing.

Effectively communicate with faculty, staff and students in multi-cultural environment.

Analyze and manipulate data from various data structures.

Write computer programs.

Solve abstract reasoning problems.

Perform detailed work rapidly and accurately.

Gather and analyze data and draw logical conclusions.

Apply sustained concentration to detailed data.

QUALIFICATIONS (continued)

Demonstrate a high degree of aptitude for programming.

Translate user requirements to system requirements.

Provide technical leadership.

Interview, train, and provide work direction to student workers.

EMPLOYMENT STANDARDS

Minimum Qualifications:

Bachelor's degree in Computer Science, Management Information Systems, or related field from an accredited college or university or related combination of education and experience.

Two years of experience in computer programming and systems design.

Special Requirements:

Stay current in changing technology by reading professional periodicals and related texts, and by attending seminars and classes.