## Job Description/Title: PROGRAMMER/ANALYST Approved, Bargaining Unit President: Reclassification Committee 4/14/15 Approved, MPC Associate Dean, Human Resources: 4/14/15 Board Approved: 6/24/15

### MONTEREY PENINSULA COLLEGE

#### **PROGRAMMER/ANALYST**

### Job Summary:

Under general direction formulate and design new or revised methods of applying computer technology toward the solution of operational problems. Design, write, test, install, maintain and enhance programs across multiple platforms to assure proper systems operations; interact with district faculty and staff to determine requirements, needs, and desired output; communicate with technical staff to assure user information needs are met. Hardware usage may vary from local servers to personal computers and local area networks.

# EXAMPLES OF FUNCTIONS

## **Essential Functions**

- 1. Analyze business, curriculum, student services, and other needs of various divisions and translate into programmable form; conduct feasibility studies for Information systems work requests.
- 2. Design program and database solutions to meet requirements of faculty and staff. Maintain and troubleshoot databases. Establish and maintain database security for users.
- 3. Develop system software and/or hardware cost requirements and proposed time lines.
- 4. Install, test, modify, and correct various information systems programs to assure their proper and effective implementation; provide training during implementation of new projects, modifications or conversions.
- 5. Review, define, and resolve information systems problems with particular emphasis on the project assigned; identify programming problems; develop effective resolutions.
- 6. Use data modeling techniques to analyze and specify data usage within application area; define logical views and physical data structures; ensure data integrity and security.
- 7. Evaluate and recommend packaged software to meet the District needs; maintain current knowledge of technological developments in the information-processing field.
- 8. Coordinate and implement installation of proprietary software packages.
- 9. Prepare reports and compile statistical data. Ensure accuracy and availability of data for and timelines of required reports such as the State Management Information System (MIS).
- 10. Support various in-house and vendor applications that interface with the district information systems.
- 11. Support Internet Information Server applications developed for the Intranet or District Intranet.
- 12. Prepare test data and testing schedules for the program or system; test and evaluate program results; make final corrections under test conditions; implement program or system.

13. Maintain records and prepare reports of work performed.

## **Other Duties**

- 1. Serve on committees related to Information Systems and make recommendations concerning hardware and software purchases.
- 2. Perform other related duties as assigned.

## **EMPLOYMENT STANDARDS**

## **Education and Experience**

Any combination of education, experience and training that indicates possession of the required knowledge, skills and abilities listed herein. For example, completion of two years of college level course work in computer science, accounting, organization and management or a related field, and three years of full-time recent programming experience including demonstrated proficiency in various languages. Experience using VB.Net, ASP.Net, ADO.Net, SQL database or equivalent. Data driven web site application experience preferred.

## **Knowledge**

Knowledge of: Microsoft Visual Studio focusing on VB.Net, ASP.Net, ADO.Net; SQL database administration and design or equivalent; Reporting tools i.e. SQL Server Reporting Services (SSRS); Mercurial source control or equivalent; operations production capacity and coordination of various types of information systems; principals, methods, techniques, procedures and practices of current computer and computer programming design, development and implementation; technical report writing; electronic data processing equipment and its capabilities; information systems management and accessing techniques; statistical methods and procedures applied to machine processes; current office methods and practices.

## **Ability**

Ability to: think in a logical, sequential manner; develop, modify and implement data processing programs; effectively use Visual Basic, ASP program language and SQL query in a Visual Studio environment; work within a windows environment on campus Local Area Network (LAN); understand data communications principles and practices including micro-to-mainframe communications and local area networks; analyze user requests and determine design of system as needed; translate problem statements into programming language; perform arithmetical calculations with speed and accuracy; use appropriate and correct English spelling, grammar and punctuation; communicate effectively in both oral and written form; learn and successfully use operating system of designated computer and microcomputer hardware; learn and efficiently use new operating systems, hardware, software and programming languages as required to fulfill the requirements of the job; work independently; establish and maintain effective work relationships with those contacted in the performance of required duties: demonstrate an understanding of, sensitivity to and appreciation for, the diverse academic, ethnic, socio-economic, disability and gender diversity of students and staff attending or working on a community college campus.

### Physical Effort/Work Environment:

Moderate physical effort; occasional standing or walking; periodic handling of moderate to heavy weight equipment or supplies up to 50 lbs. Primarily indoor work environment.