SYSTEMS ANALYST

DEFINITION

Under general supervision, performs a variety of application development and analysis functions of the assigned Department's technology and application systems; creates business processes to meet end user requirements and federal, state, College, local, and department regulatory mandates, rules, regulations, policies, and procedures; evaluates and personally participates in the functions necessary to implement and sustain the creation, maintenance, and use of assigned department's databases and applications; tests and maintains data analysis and reporting programs to enhance and support reporting requirements and data tracking needs; coordinates work and services with central Information Technology Department and other staff.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from the assigned managerial personnel. Exercises no direct supervision of staff. May provide technical and functional direction to student workers.

CLASS CHARACTERISTICS

This is a professional-level analyst classification that performs a variety of business process analysis, system application, and reporting activities. Incumbents exercise a high level of discretion and independent judgment in performing the full range of routine and complex assignments. Successful performance of the work requires thorough knowledge of database applications and basic knowledge of the College's information systems infrastructure. This class is distinguished from other information technology classes by the level of specialized technical knowledge of and emphasis on relevant software and database applications.

EXAMPLES OF ESSENTIAL FUNCTIONS (Illustrative Only)

- 1. Designs business processes for the maintenance, access, and retrieval of assigned department's data; prepares detailed flow charts and diagrams outlining system capabilities and processes; defines data rules and relationships and develops methods for quality control of the database system; reviews and evaluates database access and reporting software applications to streamline and enhance the enterprise system; creates documentation of processes.
- 2. Troubleshoots, updates, modifies, and analyzes information systems to ensure compliance with regulatory needs and changes.
- 3. Designs methods and applications to import/export data for analysis; uses various reporting tools and database applications to retrieve information from databases for staff as needed; determines required data and presentation formats.
- 4. Ensures successful storage and retrieval of data across a variety of campus systems; ensures systems interface with other campus systems; consults with information technology staff to create views and data blocks for data reporting and extraction.
- 5. Creates complex custom queries and programs for a variety of management needs and reporting requirements; creates queries to analyze and identify data integrity issues.
- 6. Monitors and maintains data integrity of department's tables, fields, reports, and related systems; works with central information technology to execute scripts to correct data issues.
- 7. Acts as the first-line contact person, representing department to staff who need assistance with any enterprise application systems module integrating with the department; provides expert technical assistance and training for staff on system procedures, system integration, data integrity, and reporting.
- 8. Plans, designs, and creates new databases for data collection, analysis, and reporting.
- 9. Coordinates with other department and College staff to facilitate the resolution of implementing and

- scheduling new and/or modified business processes and the development of new modified database processes and reporting requirements.
- 10. In collaboration with other departments, tests, and debugs applications to ensure accuracy of data and write related application documentation, including system upgrade testing and end-user documentation.
- 11. Communicates with personnel and various outside agencies as needed to exchange information and resolve issues or concerns.
- 12. Coordinates and participates testing and implementing new computer programs as appropriate, including developing and maintaining related documentation.
- 13. Participates on committees, task forces, and special assignments, including, but not limited to Screening and Selection Committees and affiliated trainings. Prepares and delivers oral presentations related to assigned areas if needed.
- 14. Performs other related or lower classification duties as assigned.

QUALIFICATIONS

Knowledge of:

- 1. Data systems concepts and structures, reporting relationships, data analysis methods, design, practices, and procedures.
- 2. Principles and practices of programming and application generation tools.
- 3. Various software packages including word processing, spreadsheet, data and database management, reporting tools, and desktop publishing applications and programs.
- 4. Basic data management, data extraction, and relational database systems theory, principles, techniques, and practices.
- 5. Research and reporting methods, techniques, and procedures.
- 6. Principles and practices of data collection and report preparation.
- 7. Modern office practices, methods, and computer equipment and applications related to the work.
- 8. Record keeping principles and procedures.
- 9. Techniques for effectively representing the College in contacts with governmental agencies, community groups, and various business, professional, educational, regulatory, and legislative organizations.

Skills & Abilities to:

- 1. Analyze situations and identifies and troubleshoots pertinent technical problems/issues; collect relevant information; evaluate realistic options; recommend/implement appropriate course of action.
- 2. Develop and implement systems application-related projects with sufficient speed and accuracy.
- 3. Review, analyze, customize, and implement software packages and database applications related to departmental projects.
- 4. Develop queries and perform complex analysis of data.
- 5. Interpret, apply, and explain technical materials to non-technical users; elicit user needs and develop and implement appropriate solutions.
- 6. Conduct research; analyze, interpret, summarize, and present technical information and data in an effective manner.
- 7. Make accurate mathematical and basic statistical computations.
- 8. Interpret, apply, explain, and ensure compliance with federal, state, and local policies, procedures, laws, and regulations.
- 9. Organize and prioritize a variety of projects and multiple tasks in an effective and timely manner; organize own work, set priorities, and meet critical time deadlines.
- 10. Use English effectively to communicate in person, over the telephone, and in writing.
- 11. Learns and applies emerging technologies and, as necessary, to perform duties in an efficient, organized, and timely manner.

- 12. Review situations accurately and determine appropriate course of action using judgment according to established policies and procedures.
- 13. Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

Education and Experience:

Equivalent to graduation from a regionally accredited four-year college or university with major coursework in computer science, computer information systems, or a related field and two (2) full time equivalent years of professional experience in designing, programming, supporting, and implementing enterprise applications.

Licenses and Certifications:

None.

PHYSICAL DEMANDS

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer; vision to read printed materials and a computer screen; hearing and speech to communicate in person and over the telephone. This is primarily a sedentary office classification although standing and walking between work areas may be required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment. Incumbents in this classification occasionally bend, stoop, kneel, reach, push, and pull drawers open and closed to retrieve and file information. Incumbents must possess the ability to lift, carry, push, and pull materials and objects up to 20 pounds.

ENVIRONMENTAL ELEMENTS

Incumbents work in an office environment with moderate noise levels, controlled temperature conditions, and no direct exposure to hazardous physical substances. Incumbents may interact with staff, students, and/or the public in interpreting and enforcing departmental policies and procedures.