

**DATE: JULY 2024**  
**FLSA: NON-EXEMPT**  
**SALARY: GRADE S**  
**CBA DESIGNATION: CLASSIFIED BARGAINING UNIT**

## **RESEARCH SYSTEMS ANALYST**

### **BASIC FUNCTION**

Performs a variety of advanced professional activities involved in institutional research and business intelligence technologies to support institutional planning efforts, decision-making, program planning, and other measures of institutional effectiveness; creates reports and visualizations to provide actionable insights and data storytelling utilizing various data sources, statistical reporting software, and enterprise-level business intelligence (BI) tools.

### **SUPERVISION RECEIVED AND EXERCISED:**

Receives general supervision from assigned area dean. May provide lead direction to temporary staff and/or student workers.

### **CLASS CHARACTERISTICS**

This advanced journey level classification is responsible for leading, designing, and conducting research projects and analysis to support Institutional Effectiveness reporting and long-term planning and decision-making. Incumbents regularly work on tasks which are varied and complex, requiring extensive knowledge and expertise to perform assigned job duties and implement program activities. Assignments are given with general guidelines and incumbents are responsible for establishing objectives, timelines, and methods to complete assignments. Work is typically reviewed upon completion for soundness, appropriateness, and conformity to policy and work requirements.

### **EXAMPLES OF TYPICAL JOB FUNCTIONS**

1. Demonstrates knowledge of programming languages including SQL, SPSS Syntax, DAX, Query M, and HTML; data collection methods and reporting tools relational database management systems and central data dictionaries.
2. Designs, creates, modifies, debugs, and administers enrollment management and student/section performance metric reports; creates, develops, and distributes visualizations of performance metrics to stakeholders.
3. Implements scripts and processes to automate data loading/pipelines from local and external sources; ensures that IR data is timely and accurate when responding to stakeholder inquiries; updates and maintains data that feed into MIS database tables used by IR District-wide, and troubleshoots data anomalies.
4. Designs, prepares, distributes, and presents institutional research findings relating to student success and equity to various stakeholders; utilizes research best practices and BI tools to present information and analytics to stakeholders.
5. Leads in research and analysis, development, testing, and implementation of BI tools; utilizes software tools, code, and scripting to transform and load data for statistical analysis and visualization.
6. Designs, prepares, distributes, and interprets institutional research studies related to academic, student services, administrative programs, and special projects.
7. Collects data needed for the development of the college's Student Success and Support Plan and the Student Equity Plan.
8. Utilizes data metrics to determine program/department performance gap analysis or needs assessments; works with area subject matter experts to identify performance gaps and recommends solutions.

9. Collects, prepares, interprets, and distributes labor market information as mandated by the Chancellor's Office for occupational programs.
10. Prepares and provides reports on special data collection efforts for state and national studies of community colleges and students.
11. Maintains historical records on student performance for current and anticipated research and planning efforts.
12. Prepares reports to support the implementation of student equity program initiatives and other special projects.
13. Represents the Office of Institutional Research on internal and external committees and projects.
14. May conduct research, and create and present findings on new educational opportunities based on labor market information in the form of reports and newsletters.
15. Presents data in various formats for College related projects.
16. Participates in District/College-provided in-service training programs.
17. Maintains a friendly, supportive atmosphere for students, staff, faculty, and the public.
18. Performs other related duties as assigned; specific duties not listed does not exclude them for this classification if the work is similar or related

## **QUALIFICATIONS**

### **Knowledge Of:**

1. Relational database management systems (RDBMS), database organization, and techniques, tools, and/or programming languages to extract, clean, and transform data.
2. Business intelligence tools and software, including techniques to export, transform, and load (ETL) data for analysis.
3. Principles, practices, procedures, and techniques involved in the research, collection, analysis, interpretation, and reporting of statistical data.
4. Computerized data collection, management, manipulation, and distribution requirements for analysis and reporting functions; record retrieval and storage systems; data verification and clean-up procedures.
5. Statistical procedures related to sampling, correlation analysis, projections and other quantitative measures applied to education research and design; statistical and mathematical computations.
6. Survey, study, data collection, and research project design, instruments, techniques, and methodology.
7. Modern office practices, methods, and computer equipment and applications related to the position.
8. Legislation and current trends in higher education, particularly as they apply to California Community Colleges.
9. Principles of student learning outcomes and general education outcomes with an equity focus.

### **Ability To:**

1. Skills in database organization and SQL queries for report-building
2. Knowledge of enterprise-level business intelligence reporting technology.
3. Lead a variety of specialized professional activities involved in the research, collection, analysis, interpretation, and reporting of data and statistics to provide information and assistance for institutional planning issues, decision-making, and program planning.
4. Apply advanced knowledge and skills in conducting institutional research and analysis projects and activities.
5. Plan, design, manage, and implement complex research projects under little direction.
6. Maintain the confidentiality of information.
7. Meet schedules and timelines.

8. Interpret, apply, explain, and ensure compliance with federal, state, and local policies, procedures, laws, and regulations.
9. Use English effectively to communicate in person, over the telephone, and in writing.
10. Learns and applies emerging technologies and, as necessary, to perform duties in an efficient, organized, and timely manner.
11. Review situations accurately and determine appropriate course of action using judgment according to established policies and procedures.
12. Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.
13. Demonstrate clear evidence of sensitivity and understanding of the diverse academic, socio-economic, disability, and ethnic backgrounds of students, staff, and the community.
14. Provide efficient, high-level customer service to the public, vendors, contractors, and District personnel.

### **Education And Experience:**

A bachelor's degree from an accredited college or university with major coursework in social or natural sciences or a related field and four (4) years of experience providing professional support to an institutional research and planning program, including one (1) year of experience working with data in a relational database management system; or an equivalent combination of education, training, and/or experience.

### **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; and hearing and speech to communicate in person and over the telephone. This classification primarily works in an office and standing in and walking between work areas is occasionally required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment. Positions in this classification occasionally bend, stoop, kneel, reach, push, and pull drawers open/close to retrieve and file information. Employees should possess the ability to lift, carry, push, and pull materials and objects up to 25 pounds. The functions of this classification must be performed by the incumbent with or without reasonable accommodations.

### **ENVIRONMENTAL CONDITIONS**

Employees work in an office environment with moderate noise levels, controlled temperature conditions, and no direct exposure to hazardous physical substances. Employees may interact with upset individuals in interpreting and enforcing departmental policies and procedures.