### SENIOR RESEARCH ANALYST

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#### DEFINITION

Under the direction of the Director of Research & Institutional Effectiveness, independently perform a variety of advanced level professional activities involved in the research, collection, analysis, interpretation and reporting of data and statistics to support institutional planning issues, decision-making, program planning and other measures of institutional effectiveness.

### SUPERVISION RECEIVED AND EXERCISED

Receives general direction from the assigned managerial personnel. Exercises technical and functional direction over and provides training to assigned staff.

This is the advanced journey-level in the Research Analyst classification series and is distinguished from the Research Analyst position in that the Senior Research Analyst leads, designs, and conducts all levels of research projects in the Research & Institutional Effectiveness Department. The incumbent provides guidance and lead work direction to lower level research staff and provides suggestions to the Director, Research & Institutional Effectiveness regarding the operation of the unit and how to improve efficiencies.

## **EXAMPLES OF ESSENTIAL FUNCTIONS** (Illustrative Only)

- 1. Leads and coordinates day-to-day projects, services, and/or activities; recommends improvements or modifications.
- Independently Plans, coordinates, and conducts 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, decisionmaking and program planning.
- 3. Responds to and evaluates ad hoc requests for data, statistical analysis, research projects and studies; prepares requests for processing; arranges and maintains project schedules and timelines; designs strategies to complete assignments; analyzes and compares a variety of data solutions; makes team project recommendations to the Director.
- Assists Director to evaluate and respond to requests for complex or original research support
  from within and outside the <u>College</u> <u>District</u>; works independently with requestors to clarify
  their needs and optimize the utility of research results.
- 5. Designs, develops, and conducts advanced institutional research projects and activities to support external and internal accountability mandates in areas such as instructional and service performance, program review, enrollment management, matriculation, outcome assessment, student assessment exam instrument validation, evaluations, and staff development.
- 6. Writes research reports containing descriptive, analytical, and evaluative content including the preparation of conclusions and forecasts based on data summaries and other findings.
- 7. Prepares a variety of narrative and statistical records, reports and files related to institutional planning, research projects, data analysis, findings, conclusions, decision-making and

- assigned activities; designs and produces related charts, tables, and graphs.
- 8. Provides technical support, assistance and training to staff, faculty, administrators, and others concerning institutional effectiveness and related data and statistics; responds to inquiries and provides technical information concerning related projects, reports, research, practices, policies, and procedures.
- 9. Reviews, analyzes, and arranges data according to project and study specifications and requirements; evaluates data acquisition processes and resources to assure accuracy and completeness; prepares statistics, research data and reports for distribution and disseminate to appropriate personnel.
- 10. Collaborates with staff, faculty, and administrators in the design, development, and implementation of research projects; advises personnel and others concerning valid research design and data collection, appropriate use of data and research results in generating recommendations.
- 11. Assist College staff with conducting special research projects in classrooms or labs.
- 12. Assists Information Technology with the maintenance of specialized databases and information systems such as the data warehouse for enhancement in order to facilitate research and planning activities.
- 13. Manages the input and coding of a variety of data and information into an assigned computer system including but not limited to queries, extractions and manipulation of computerized data, records, and reports for use in projects, studies, and analysis.
- 14. Develops and implements analysis plans for complex data sets; examines and integrates information from various sources and of variable quality; provides insights based on systematic assessment of qualitative and quantitative data; evaluates regular research operations routinely to recommend strategies for improvement.
- 15. Communicate with personnel and various outside agencies to exchange information and resolve issues or concerns
- 16. Attend and participate in various campus wide meetings as assigned to serve as a liaison for the Research Office.
- Provides conceptual ideas from research perspectives and suppliess data evidence assisting with decision-making.
- 18. Prepare and deliver oral presentations concerning study and project data, findings, and related reports
- 19. Develops, maintains, organizes, and utilizes extensive data files/ and databases using various computer platforms and software (e.g., database, spreadsheet, and statistical).
- 20. Plans, develops, and implements techniques to optimize the efficiency and effectiveness of data collection, research, and reporting activities.
- 21. Work collaboratively with various campus units to stay abreast of reporting needs and comply with federal and state reporting requirements
- 22. 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.
- 23. Perform other related or lower classification duties as assigned.

# **QUALIFICATIONS**

Knowledge of:

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- 1. Principles, practices, procedures and techniques involved in the research, collection, analysis, interpretation and reporting of statistical data.
- Computerized data collection, management, manipulation and distribution requirements for analysis and reporting functions; record retrieval and storage systems; data verification and clean-up procedures.
- 3. Principles, methods and procedures of operating computers and peripheral equipment
- 4. Record retrieval and storage systems
- 5. Qualitative and quantitative analysis, and longitudinal, and program evaluation studies.
- Statistical procedures related to sampling, correlation analysis, projections and other quantitative measures applied to education research and design: statistical and mathematical computations.
- Survey, study, data collection and research project design, instruments, techniques and methodology.
- 8. Report writing and statistical record-keeping techniques.
- 9. Data verification and clean-up procedures
- 10. Correct English usage, grammar, spelling, punctuation and vocabulary
- 11. Interpersonal skills using tact, patience and courtesy
- 12. Effective oral and written communication skills
- 13. Statistical and mathematical computations-
- 14. Modern office practices, methods, and computer equipment and applications related to the work.
- 15. Issues and current trends in higher education, particularly as they apply to California Community Colleges.
- 16. Principles of student learning outcomes and general education outcomes.
- 17. Principles, practices, and procedures of educational measurement.
- 18. 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:

- 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.
- 2. Apply advanced knowledge and skills in conducting institutional research and analysis projects and activities.
- 3. Plan, design, manage and implement complex research projects independently.
- 4. Maintain the confidentiality of information.
- 5. Plan, organize and prioritize tasks.
- Review and monitor routines of data extraction; diagnose and modify techniques and procedures to ensure data integrity and relevance.
- Provide technical assistance/training concerning institutional effectiveness and related data and statistics.
- Review, analyze and arrange data according to project and study specifications and requirements.
- Utilize a computer to input data, create queries, extract and manipulate information, generate links to data and produce a variety of computerized data, records and reports.

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Develop and generate tables and graphics to enhance data presentation and reporting.

- 10.
- 11. Design, develop and implement research project surveys, instruments and methodologies.
- 12. Type or input data at an acceptable rate of speed.
- 13. Write clear, comprehensive, and effective reports.
- 14. Anaylze Analyze and interpret findings.
- 15. Prepare a variety of narrative and statistical lists, records and reports.
- 16. Establish and maintain cooperative and effective working relationships with others.
- 17. Work independently with little direction.
- 18. Communicate effectively both orally and in writing.
- 19. Meet schedules and timelines.
- 20. Interpret, apply, explain, and ensure compliance with federal, state, and local policies, procedures, laws, and regulations.
- 21. Use English effectively to communicate in person, over the telephone, and in writing.
- 22. Learns and applies emerging technologies and, as necessary, to perform duties in an efficient, organized, and timely manner.
- 23. Review situations accurately and determine appropriate course of action using judgment according to established policies and procedures.
- 24. Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work,
- 25. Operate a variety of office equipments including a copier, fax machine, scanner and computer.
- 26. Perform accurate mathematical and statistical calculations.

### **EDUCATION AND EXPERIENCE:**

Any combination equivalent to: Equivalent to graduation from a regionally accredited fouryear college or university with major coursework bachelor's degree from an accredited institution in behavioral science, mathematics, computer science, business administration, behavioral science or related field and three (3) full time equivalent years of progressively responsible experience involving statistical research and analysis including work with computer databases and software applications at a professional level. Direct experience in institutional research preferred.

### Preferred Qualifications:

Direct experience in institutional research for two (2) of the three (3) full-time equivalent years of progressively responsible experience

Working knowledge of Structured Query Language (SQL) and Operational Data Store (ODS) or equivalent.

### **Licenses and Certifications:**

The incumbent may periodically be required to travel to a variety of locations. If operating a vehicle, employees must have the ability to secure and maintain a valid California driver's license.

## PHYSICAL DEMANDS

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**Commented [MNB2]:** Can we add 2 of those 3 years in IR? It is so very, very needed!

so very, very needed!

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Commented [MNB3]: Add "or equivalent" because there are many programming and data storage experiences that they could have that could easily allow them to translate those skills to SQL and ODS

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Must possess mobility to work in a standard office setting and use standard office equipment, including a computer; to operate a motor vehicle to visit various meeting sites; vision to read printed materials and a computer screen; and hearing and speech to communicate in person, before groups, and over the telephone. This is primarily a sedentary office classification although standing in 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. Positions in this classification occasionally bend, stoop, kneel, reach, push, and pull drawers open and closed to retrieve and file information. Employees must possess the ability to lift, carry, push, and pull materials and objects weighing 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.

## **WORKING CONDITIONS:**

#### **ENVIRONMENT:**

Office environment.

### **PHYSICAL DEMANDS:**

Dexterity of hands and fingers to operate a computer keyboard Seeing to read a variety of materials and view a computer monitor Hearing and speaking to exchange information

Sitting and operating a keyboard to enter and manipulate data into a computer for extended periods of time.

#### **POSSIBLE HAZARDS:**

Extended viewing of computer monitor.

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