

## STATISTICIAN SERIES

<u>Code No.</u>	<u>Class Title</u>	<u>Occ. Area</u>	<u>Work Area</u>	<u>Prob. Period</u>	<u>Effective Date</u>	<u>Last Action</u>
3300	Statistician	02	072	6 mo.	12/15/11	Rev.
3301	Statistician Specialist	02	072	6 mo.	12/15/11	Rev.

### *Promotional Line: 358*

#### Series Narrative

Employees in this series prepare, analyze, and interpret statistical materials and/or design, direct, and conduct statistical studies.

#### DESCRIPTIONS OF LEVELS OF WORK

##### Level I: Statistician

**3300**

Employees at this level collect, prepare, analyze, and interpret material requiring a comprehensive knowledge of statistics. They work under general supervision from a designated supervisor.

A Statistician typically –

1. is responsible for the compilation and interpretation of statistical data.
2. prepares both descriptive and tabulated reports.
3. reports results of statistical analyses, including information in the form of graphs, charts, and tables.
4. processes large amounts of data for statistical modeling and graphic analysis, using computers.
5. maintains records and files.
6. interprets trends.
7. coordinates with and determine clients' needs.
8. plans procedures and techniques for solution of statistical problems.
9. collects, analyzes and interprets statistical data to identify significant differences in relationships among sources of information.
10. prepares data for processing by organizing information, checking for any inaccuracies, and adjusting and weighting the raw data.
11. analyzes quantitative and/or qualitative statistical data.
12. computes and provides requested data by using statistical, graphical, spreadsheet and database software packages, such as SAS, SPSS (statistical software packages), Excel and Access.
13. performs other related duties as assigned.

**Level II: Statistician Specialist****3301**

Employees at this level originate, plan, direct, and conduct statistical research and analyze and prepare the results for publication. They work under administrative supervision from a designated supervisor.

A Statistician Specialist typically –

1. originates and plans statistical research.
2. collects, analyzes, and presents complex statistical data.
3. supervises charting and diagramming of data.
4. interprets data and summarize results.
5. prepares findings for publication.
6. evaluates the statistical methods and procedures used to obtain data to ensure validity, applicability, efficiency, and accuracy.
7. evaluates sources of information to determine any limitations in terms of reliability or usability.
8. plans data collection methods for specific projects and determine the types and sizes of sample groups to be used.
9. designs research projects that apply valid scientific techniques and use information obtained from baselines or historical data to structure uncompromised and efficient analyses.
10. develops an understanding of fields to which statistical methods are to be applied to determine whether methods and results are appropriate.
11. makes constructive criticism of statistical studies.
12. appraises comparative values of various statistical techniques.
13. supervises statistical and clerical workers.
14. performs duties of the lower-level in this series as required.
15. performs other related duties as assigned.

**MINIMUM ACCEPTABLE QUALIFICATIONS REQUIRED FOR ENTRY INTO****Level I: Statistician****3300**

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

1. Bachelor's degree with a minimum of 6 semester hours in statistics and a minimum of 6 semester hours in algebra, geometry, calculus, or statistics at the college level

2. Two (2) years (24 months) of work experience that required the use of statistical, graphical, spreadsheet, and database software packages, such as SAS, SPSS, Excel and Access

**KNOWLEDGE, SKILLS AND ABILITIES (KSAs)**

1. Accuracy
2. Thoroughness
3. Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications
4. Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming
5. Skill using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems
6. Ability to prepare, analyze, and interpret complex statistical data
7. Ability to choose the right mathematical methods or formulas to solve a problem
8. Ability to combine pieces of information to form general rules or conclusions (includes finding a relationship among seemingly unrelated events)
9. Ability to communicate information and ideas in speaking so others will understand
10. Ability to read and understand information and ideas presented in writing

**Level II: Statistician Specialist****3301****CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER**

1. (A) Bachelor's degree with a minimum of 6 semester hours in statistics and a minimum of 6 semester hours in algebra, geometry, calculus, or statistics at the college level

AND

Two (2) years (24 months) of work experience that required the use of statistical, graphical, spreadsheet, and database software packages, such as SAS, SPSS, Excel and Access

OR

- (B) Master's degree in statistics or mathematics
2. One (1) year (12 months) performing comparable duties of the Statistician

## KNOWLEDGE, SKILLS AND ABILITIES (KSAs)

1. Supervisory ability
2. Acquaintance with current literature and advanced statistical techniques
3. Evidence of ability to plan statistical undertakings, collection, and compilation of data
4. Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications
5. Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming
6. Skill using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems
7. Ability to prepare, analyze, and interpret complex statistical data
8. Ability to choose the right mathematical methods or formulas to solve a problem
9. Ability to combine pieces of information to form general rules or conclusions (includes finding a relationship among seemingly unrelated events)
10. Ability to communicate information and ideas in speaking so others will understand
11. Ability to read and understand information and ideas presented in writing