#### EPRS8530

Writing Projects (Computer Assignments) Guidelines

There are two writing projects in this class. The objectives of these projects are (1) to apply basic statistical procedures (descriptive and inferential) to real data problems and (2) to summarize the results. You will choose your own data. Since this is a practice, small data sets are recommended. In each project, you will turn in a brief report of <u>no more than two typed pages</u>. Use your chosen statistical software to calculate statistics (e.g., SPSS, a spread sheet program such as Excel, or any other software). For graphing, Excel often produces better graphs than SPSS.

The report should include a cover page (see below) and write-up. Your write-up should include:

- description of the study
- methods
- results
- discussion/conclusions

You may obtain data in various places. Please use data in such a way that you do <u>not</u> need an IRB approval (see <a href="http://ursa.research.gsu.edu/ursa/compliance/human-subjects/fag/">http://ursa.research.gsu.edu/ursa/compliance/human-subjects/fag/</a>).

#### Examples:

- Data that you have at work (e.g., grade book, test data, etc.)
- Data you collect at work
- Data you collect in the class
- Data you find in newspapers, journal, Internet, etc.
- Anywhere else

Format: There are two reasons for the uniformed format:

- 1. Fairness in grading
- 2. Development of the problem bank. Your problem and data may be used in the future statistics class. If you do not want your problem and data to be used anywhere else. Please make a note on the cover page.

**Cover Page**: (An example is attached at the end of this handout.) Limit to one page, if possible. Use the bottom half of the paper for the problem and data. Use the upper half of the paper for identifying the following information:

- 1. Your name, discipline area
- 2. Title of the problem
- 3. Area of the problem (e.g., Special Ed, CPS, General Interest, etc.)
- 4. Type of statistical analysis (e.g., Independent t test, etc.)
- 5. Statistical software you used (e.g., SPSS, Excel, etc.)
- 6. Source of data. List the reference if the data are from a book, an article, and so forth. If the data are fictitious or you collected data, please mention so.

In the bottom half, state the problem and list the data in a concise manner.

**Write-Up**: Limit to less than two pages, if possible. Follow the APA format (Introduction, Method, Results, and Discussion). To save time/space for downloading, please use single space for this project.

First Project (Due before Exam 1. Please check the exact due date on your current syllabus/outline.)

The objective of this first project is for you to be able to summarize data with **descriptive** statistics. The report should include the following:

- Measures of central tendency
- Measures of variation
- Correlation
- Graph(s) (e.g., histogram, polygon, or scatter plots)

Second Project (Due before Exam 2. Please check the exact due date on your current syllabus/outline.)

The objective of this second project is for you to be able to summarize data with **inferential** statistics. The report should include the following:

• One sample t-test, independent t-test, or dependent t-test

The Grading Policy:

The rubrics for grading each project are attached at the end of this document.

I will be happy to look at your progress report (draft) before your final submission. You may also find sample projects from previous classes be useful. <a href="http://coshima.davidrjfikis.com/EPRS8530/sample projects from former stud.htm">http://coshima.davidrjfikis.com/EPRS8530/sample projects from former stud.htm</a>

Please note that sample projects on my Web may not include the cover page. Please be sure to include the cover page for your submission.

Note: Please turn in your projects in the Dropbox in D2L including the draft you may submit. Be sure to name your file as follows:

Example

Joe\_Smith\_Project 1\_Draft1.doc

The APA Style:

My former TA made an excellent handout on the APA style:

 $\underline{http://coshima.davidrjfikis.com/EPRS8530/APA\%20Guidelines\%20for\%20Quant\%20Students\%20by\%20Dell-Ross.pdf}$ 

A nice and concise guide to the APA style can be found at: <a href="http://facelab.org/debruine/Teaching/Meth">http://facelab.org/debruine/Teaching/Meth</a> A/files/Reporting Statistics.pdf

Those who would like to learn more about the APA style can find various useful sites on the internet. Some examples are:

 $\underline{http://www4.uwsp.edu/psych/mp/APA/apa4b.htm}$ 

http://my.ilstu.edu/~mshesso/apa\_stats.htm

The ultimate guide is the latest edition of "Publication Manual of the American Psychological Association".

### EPRS8530 Project 1 Cover Page

- 1. Name: XXXX XXXXX, Counseling Psychology
- 2. Relationship between attendance, assignments, and final examination performance in a Career Development and Planning class
- 3. General Interest
- 4. Descriptive Statistics, Correlation, Graph
- 5. SPSS and Excel
- 6. Collected data from my class.

### **Problem**

The purpose of this study is to investigate the relationship between attendance, performance on assignments and final exam performance of a total of twenty five students in a Career Development and Planning class during the spring 2008 semester. It is also to establish if attendance has an impact on the performance of students and if assignments play a role in their learning outcome.

#### Data

Student	Attendance	Assignments	Final
1	32	67	29
2	31	64	28
3	32	66	29
4	32	64	28
5	27	58	26
6	31	65	28
7	27	61	26
8	32	63	28
9	25	49	22
10	20	41	20
11	31	60	26
12	32	63	29
13	22	64	27

14	31	65	28
15	27	66	27
16	25	50	24
17	28	53	22
18	27	65	28
19	30	59	26
20	32	65	29
21	25	63	30
22	32	65	30
23	32	63	30
24	26	60	22
25	19	39	18

# Rubric for Project 1

Criteria	Needs Improvement 1 point	Moving in the Right Direction 2 points	Valuable Performance 3 points	Our Goal 4 points
Organization	Minimally addresses the required components.	Addresses most of the required components	Addresses all required components but does not include the cover page	Addresses all required components and includes the cover page
Research Method	Inadequate attempt to explain the research question and methodology for collecting data.	Minimal attempt to explain the research question and methodology for collecting data.	Adequate explanation of the research question and methodology for collecting data.	Clearly states the research question which is appropriate and clearly explains methodology for collecting data.
Statistical Knowledge	Confused explanation of statistical concepts and use of inappropriate vocabulary.	Minimal understanding of statistical concepts and vocabulary	Adquate understanding of statistical concepts and vocabulary	Thorough understanding of statistical concepts and vocabulary
Graphic Display	No graph is presented.	Presents a graph with inappropriate components.	Presents a graph with unclear labels.	Clearly presents a graph with appropriate labels.
Writing Style	Not written in the journal style writing.	Minimal understanding of the APA style writing.	Approaching the APA style writing, but some details in statistical presentations need improvement.	Almost always uses correct APA format for statistical presentations. May require minor refinement for the next project.
Overall Score	D 0 or more	C 14 or more	B 16 or more	A 18 or more

# Rubric for Project 2

Criteria ▽	Needs ▽ Improvement 1 point	Moving in the ▽ Right Direction 2 points	Valuable ▽ Performance 3 points	Our Goal ▽ 4 points
Organization	Minimally addresses the required components.	Addresses most of the required components	Addresses all required components but does not include the cover page	Addresses all required components and includes the cover page
Research Method •	Inadequate attempt to explain the research question and methodology for collecting data.	Minimal attempt to explain the research question and methodology for collecting data.	Adequate explanation of the research question and methodology for collecting data.	Clearly states the research question which is appropriate and clearly explains methodology for collecting data.
Statistical Knowledge	Confused explanation of statistical concepts and use of inappropriate vocabulary.	Minimal understanding of statistical concepts and vocabulary	Adquate understanding of statistical concepts and vocabulary	Thorough understanding of statistical concepts and vocabulary
Hypothesis Testing •	Conclusions are not expressed clearly and have no basis in statistical fact. Inappropriate use of vocabulary.	Conclusions are expressed with little justification. Minimal understanding of vocabulary	Conclusions are expressed clearly with justifications. Adequate understanding of vocabulary and appropriate use.	Conclusions are expressed clearly with obvious and extensive understanding of the topic. Thorough understanding of vocabulary with correct usage.
Writing Style	Not written in the journal style writing.	Minimal understanding of the APA style writing.	Approaching the APA style writing, but some details need improvement.	Consistently uses correct format for the APA style, including details such as italicizing and spacing.
Overall Score    ▼	D ▼ 0 or more	C ▼ 14 or more	B ▼ 16 or more	A ▼ 18 or more