Social Statistics
Fall 2008
SOCG 5123-001
Saturday 11:50
G.R. Woolfolk Building 110

Instructor: Dr. Jackie Burns
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Office Phone: 3219
Office:308 Woolfolk Bldg
Office Hours: MW 2pm to 4pm nd Sat 9am – 11am
And by appointment

Required Text: Statistics for the Behavioral and Social Sciences 4th Arthur Aron; Elaine Aront; Elliot Coups Pearson-Prentice Hall 978-0-13-1562783
Required Materials: Data Analysis w/SPSS a First Course is Applied 3rd Edition Stephen Sweet and Karen Grau Martin Pearson 978-0-205-48387-7

Optional Books

Title: How to Ask Survey Questions
Author: Arlene Fink
Publisher: Sage
ISBN: 9780761925798
Edition:

Title: How to Manage, Analyze, & Interpret Survey Data
Author: Arlene Fink
Publisher: Sage
ISBN: 9780761925767
Edition:

Title: How to Report on Surveys
Author: Arlene Fink
Publisher: Sage
ISBN: 9780761925750
Edition:

Purpose:
The purpose of this course is to establish the relationship between theory and research and the role of statistics in the research process. Introduce two general classes of statistical techniques: descriptive and inferential statistics.

Course Objectives:
1. To become statistically literate and be able to analyze and interpret the meaning of a statistical test.
2. To be able to comprehend and critically appreciate research reports
3. To be able to select an appropriate statistics for a given purpose and a given data set.
4. Become proficient in using SPSS for Windows to manipulate and analyze data.
5. Create a statistics notebook containing accurate applications of various descriptive and inferential statistical tests.

Course Learning Outcomes	**Competencies (T, R, I)**		
	T competency is taught	R Competency is reinforced	I Competency is utilized/ integrated
Demonstrate a working knowledge of measurement of central tendency, z-tests, t-tests, and analysis of variance.	T	R	I
Demonstrate a working knowledge of correlation techniques and fundamentals of regression analysis.	T	R	I
Ability to select an appropriate statistic for a given purpose and a given data set.	T	R	I
Become proficient in using SPSS for Windows to manipulate and analyze data.	T	R	I

Attendance: You are required to attend all class meeting times. We will be meeting in the computer lab and each session we will be utilizing SPSS software to complete weekly assignments.

Coursework:
All assignments are expected to be turned in on the date indicated on the assignment.
- 1 point for each day late will be deducted from the final score.
- You may submit your work to me via email.
- The actual assignments are not included in this general course syllabus and will be provided during our meetings at the time they are made. During our meeting times we will go through each of the assignments step by step and provide supplemental handouts.
- Assignments are based on the end of chapter problems provided in your text. They include both the use of concepts and measures introduced in the chapter and the use of SPSS and the General Social Survey. The text provides you with step by step instructions on how to manipulate and analyze the GSS data, and interpret the results. Be sure to read Appendix F before attempting any data analysis
- When the graded assignments are returned to you please place them in a three ring binder with tabs indicating the chapter heading. At the end of the semester you

will be given up to 20 points for a complete and well organized binder and should includes notes you have taken while reading the various chapters and explanations from the instructor. It should also include all work from your SPSS data analysis. We will spend some time to make sure it is in order before I evaluate for the credit.

Research Paper

You will be required to write a research paper using the General Social Survey data. The paper will include the following: Statement of purpose, research methodology, operational definition of variables, statistical test, analysis, and findings.

Grading:

12 SPSS application assignments	300 points (25 point each)
STAT notebook	020 points
Research Paper	100 points

A= 420 - 370
B= 369 -319
C= 318 -268
D= 267 – 217
F= 216 and below

Attendance

Attendance is mandatory effective September 1, 1998 Prairie View A&M requires regular class attendance. "Excessive absenteeism, whether EXCUSED or UNEXCUSED, may result in a student's course grade being reduced or in a student's being assigned a grade of "F" (Student registration Handbook, page 18, Spring 2006).

I will be taking attendance at the end of each class. If you have conflicts due to work, settling affairs with campus administration, child care issues, etc please email the date you will be absent or were absent and why and I will keep on file.

Students with Special Needs

Prairie View A&M offers support services for students with documented physical or psychological disabilities. Students with disabilities must request reasonable accommodations through the Office of Disability Services, Evans Hall, Room 317, phone 857-2610. Please make an appointment to see me during office hours and we will make all the necessary arrangements for the semester.

Academic Honesty

Scholastic dishonesty includes but is not limited to cheating on an exam or quiz, plagiarizing, and unauthorized collaboration with another in preparing outside work. Academic work submitted by students shall be the result of their thought, research or self-expression. Any student caught cheating or committing acts of plagiarism will be immediately reported to the Departmental Chair and the Dean of the College for a fair hearing and remediation.

Student Conduct in the Classroom

You the student and/or your relatives and friends have made great efforts for you to be enrolled in this course. I too have invested a great deal of time and energy to develop interesting and thought provoking lectures to stimulate your critical thinking and engage in a higher level of academic inquiry. There are certain behaviors in the classroom that impedes my being able to facilitate the learning process and the ability of your fellow colleagues (peers) from learning.

1.   Be on time to class and if you can not be on time enter quietly.
2.   Do not leave class early and if it is unavoidable notify me before class.

3.   Please turn your cell phone ringer off and put it away.
4.   No text messaging
5.   Do not hold side conversations with other students. If you have comments address it to the instructor and entire class – we will most likely benefit from your insight.
6.   When class is dismissed please walk quietly through the hallways since there are classes in other rooms that may still be in session

Course Syllabus

Week 1

Prologue: Basic Mathematics Review
Chapter 1   Introduction
Introduction to SPSS and the General Social Survey

PART ONE: DESCRIPTIVE STATISTICS
Chapter 2   Basic Descriptive Statistics
Percentages, Ratios and Rates, Tables, Charts, and Graphs
Using SPSS Windows to produce frequency distributions and graphs

Week 2

Chapter 3   Measures of Central tendency
Mode, median, mean and some characteristics of the mean.
Using SPSS for Windows for measures of central tendency.

Week 3

Chapter 4   Measures of Dispersion
Computing the Range and Interquartile Range, standard deviation and variance.
Using SPSS for Windows for measures of dispersion.

Week 4

Chapter 5   The Normal Curve
Computing z-scores and using the normal curve to estimate probabilities.
End of chapter Applications.

Week 5

PART II INFERENTIAL STATISTICS
Chapter 6   Introduction to inferential statistics, the sampling distribution, and estimation
Step-by-step: Constructing Confidence Intervals for Sample Means
Constructing confidence interval
Controlling width of confidence intervals
End of Chapter Application and Problems

Week 6

Chapter 7   Hypothesis Testing I
The One-Sample Case
The Five step model for hypothesis testing
End of Chapter summary of formulas and Problems

Week 7

Chapter 8   Hypothesis testing II
The Two Sample Case
Testing difference of two sample means, Hypothesis testing with sample
proportions
Using SPSS for Windows to test the significance of the difference
between two means.

Week 8

Chapter 9   Hypothesis Testing III
The Analysis of Variance (ANOVA)
The logic and computing of ANOVA a test of significance for ANOVA
Using SPSS for Windows to conduct analysis of variance.

Week 9

Chapter 10   Hypothesis Testing IV
The logic and computation of Chi Square
Using SPSS for Windows to conduct the Chi Square Test.

Week 10

Chapter 11   Introduction to Bivariate Association Measures
Measures of Association for Variables Measured at the Nominal Level
Using SPSS for Windows to test bivariate association for significance and
association

Week 11

Chapter 12   Association between variables measured at the ordinal level
Using SPSS for Windows to produce ordinal level measures of
association.

Week 12

Chapter 13   Association between variables measured at the interval-
ratio level.
Scattergrams, regression and prediction
Computing the slope and Y intercept and Pearson's r
Interpreting the Correlation Coefficient
Using SPSS for Windows to produce Pearson's r

Week 13

Chapter 14   Partial Correlation and Multiple Regression and Correlation
Computing and Interpreting Partial Correlation
Multiple regression: Predicting the dependent variable, assessing the effects of independent variables
Computing Beta-Weight
Multiple Correlations
Using SPSS for Windows for regression Analysis

Week 14   Last Day of Class – Turn in All Work including Statistics Notebook.