

## **Statistics for the Behavioral and Social Sciences I: E10.2001**

**Fall, 2008**

### **Instructor:**

**Instructor:** Sharon L. Weinberg  
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**Office:** Kimball Hall, 246 Greene Street, 509W  
**Office Hours:** Tuesdays, 10 am to noon and by appointment

### **Class Meeting Time/Room:**

Mondays, 2:00 to 4:45 pm in Silver 701.

### **Computer Lab:**

As a student in this class you have priority access to the computer labs which means that you may enter the lab at any time by swiping your ID. The regular lab consultants often do not know SPSS, but they can answer system level questions about accessing SPSS, and saving, printing, and opening files.

### **Course Goals and Orientation:**

This course introduces students to the basic tools of applied statistics, using the latest version of SPSS as a platform to achieve a hands-on experience with real data. The course covers topics in descriptive statistics (measures of location, variability, correlation, and simple regression) and in inferential statistics that are fundamental to understanding the logic of inferential tests, including probability, the central limit theorem, and sampling distributions in general. Two tests of inference are covered as well.

The orientation of the course is conceptual, not mathematical. Accordingly, the course is not appropriate for students seeking to learn the mathematical theory underlying the statistical techniques covered. The course is intended for doctoral students, but some masters' students may enroll with the permission of the instructor.

**Prerequisites:** A course in high school algebra.

**Website:** The course uses Blackboard for posting handouts, readings, homework assignments, project assignments, and general information.

**Required Text:** *Statistics Using SPSS* by Weinberg, S. L. & Abramowitz, S. A., 2<sup>nd</sup> edition. (2008). Cambridge University Press. This book is available in the NYU Book Store.

### **Course Requirements & Grading:**

**Homework:** Practicing what has been covered in class is essential to learning statistics. Homework will be assigned, collected, and graded each week. All students are responsible for completing all homework assignments on time and raising related questions in class.

**Project:** Students are expected to complete a project that requires the selection of appropriate statistical methods to answer a series of questions based on a given data set made available by the instructor and to interpret and communicate findings in a journal-like format.

**Exams:** There will be one midterm and one cumulative final.

**Grading:**

- 15% Homework
- 25% Midterm Exam
- 25% Final Exam
- 35% Project that requires the analysis of data and the communication of results in the form of a journal-like article.

**Syllabus:**

<i>E10.2001 Syllabus – Statistics for the Behavioral and Social Sciences I</i>		
<i>Month</i>	<i>Day</i>	<i>Topic</i>
September	8	Overview & Introduction to SPSS: Chapter 1
	15	Examining univariate distributions: Chapter 2
	22	Measuring location, spread, and skewness: Chapter 3
	29	Re-expressing variables: Chapter 4
October	6	No Class – “Fall Break”
	13	Review for Midterm: Ch 1 through 4 Bivariate relationships: Chapter 5
	20	MIDTERM: Includes material through Chapter 4
	27	Review Midterm Results Simple linear regression: Chapter 6
November	3	Simple linear regression cont'd.
	10	Probability fundamentals: Chapter 7
	17	Theoretical probability models: Chapter 8
	19 (Legislative Day)	The role of sampling in inferential statistics: Chapter 9
	24	The role of sampling continued: Chapter 9
December	1	Hypothesis testing using the z-test: Chapter 10
	8	LAST CLASS. PROJECT DUE. Review for Final.
	15	Final Exam -- Includes all material covered during the semester

