

**Social Data Analysis**  
Sociology 563  
T-TH: 2:10-3:30  
SS, Room 258  
Spring 2008

Instructor: Dusten Hollist  
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**Objectives and a Promise:**

The objective of this course is to expose you to the statistical methods that are commonly used in the professional practice of sociological research. In contrast to a course that focuses on an in depth treatment of a single technique, our objective will be a more broad treatment of multiple methods. The goal is that by the end of the course each of you will have a basic understanding of how to both use and interpret results pertaining to the quantitative methods we will cover.

Here is a promise. I know that not everyone is excited about statistics and classes regarding statistical methods. Some of you may have had negative experiences in the past and may be apprehensive about this course. This will be a challenging, yet very manageable course. It will also be informative and rewarding if you let it. I will come to class each day ready to teach and answer questions. You should plan to come to class to learn and ask questions. I have found that a class environment this is open and interactive is the best way to teach this course.

**Texts:**

The following text is required:

Mertler, Craig A. and Rachel A. Vannatta. 2002. *Advanced and Multivariate Statistical Methods, 2<sup>nd</sup> Edition*. Pyrczak Publishing: Los Angeles.

**Course Requirements:**

Students are expected to attend class each time we meet. We will be covering issues pertaining to the theory behind the various methods that we will cover. We will also spend a substantial amount of time actually running the methods and interpreting the results. There will be a total of ten problem sets (ten points each) that are assigned throughout the duration of the semester. Generally, they will be given on Thursday and will be due on the following Tuesday. There are three article critiques (25 points each). A data analysis paper (100 points) on a topic of your choice is due during the final exam time scheduled for the course (December 15<sup>th</sup>). In addition, each student will have the

opportunity to earn 20 points for class participation. The total points available in the course are 295.

### **Problem Sets:**

The problem sets will regularly be given. These will involve a variety of things pertaining to calculating and interpreting statistical data. Each member of the class is required to submit the problem sets. However, many of them are such that they can be worked on in groups with each individual member writing and submitting his/her own draft of the assignment.

### **Research Paper:**

The data and topic of the research paper need to be approved before you start. I have secondary data sources that may be of interest to you and your research paper. I will speak at length about these data sources during class time. The paper should follow standard journal article formatting, but may be lighter on the theoretical background and literature review. The last session of the semester and the final meeting time will be devoted to student presentations of their work. These presentations should be approximately fifteen minutes long.

### **Statistical Software:**

We will be using SPSS (Statistical Package for the Social Sciences) in the class. SPSS is a data processing program that unlike STATA and SAS (other popular data analysis packages) does not require extensive computer programming. If you have the ability to navigate a windows point and click operating system, the knowledge needed to navigate the SPSS program should be easily obtained. SPSS will be provided to you in the lab. Often however, students elect to purchase the program for use on their home PC'S. If you plan to practice quantitative methods owning your own copy of the software is desirable.

### **Grades:**

As mentioned above, there are a total of 295 points available in the course. Grades will be based on an average of the number of points each students earns in relation to the 230 points available. Grades will be distributed along the following cut-offs:

A	90-100 percent	B	80-89
C	70-79	C	60-69
F	59 and below		

### **Class Policies and Issues:**

Class will begin each time we meet at 5:10 and will run until 6:30. At this level it is expected that students come prepared to work. Each of us will be working at different levels of proficiency toward a common goal. Disrespecting either other students or the instructor will not be tolerated. Comments and questions are encouraged and in order to maintain this we need a classroom environment where people feel comfortable addressing issues. Common courtesy for one another will go a long way in aiding this goal. Plagiarism and all other forms of cheating will not be tolerated. If there are

concerns regarding what comprises academic dishonesty (cheating) and plagiarism see me immediately.

### **A Final Note:**

Feel free to come and see me if you need to discuss the course material or anything else related to your academic concerns. Our relationship will work best if we are able to openly discuss issues. I have an open door policy and will remain responsive to issues and concerns that arise.

## **Course Schedule**

<b>Monday</b>	<b>Wednesday</b>
Aug 30 <sup>th</sup> : Introduction Mertler Ch. 1	Sept 1 <sup>st</sup> : Philosophy of Science Mertler Ch. 1 (P)
Sept 6 <sup>th</sup> : Labor Day Holiday No Classes	Sept 8 <sup>th</sup> : Sampling Mertler Ch. 2 (P)
Sept 13 <sup>th</sup> : Multivariate Techniques Mertler Ch. 2	Sept 15 <sup>th</sup> : Data Screening Mertler Ch. 3 (P)
Sept 20 <sup>th</sup> : Analysis of Variance Mertler Ch. 4	Sept 22 <sup>nd</sup> : Analysis of Variance Mertler Ch. 4 (P)
Sept 27 <sup>th</sup> : Analysis of Variance Mertler Ch. 5	Sept 29 <sup>th</sup> : Analysis of Variance Mertler Ch. 5 (P)
Oct 4 <sup>th</sup> : Analysis of Variance Mertler Ch. 6	Oct 6 <sup>th</sup> : Analysis of Variance Mertler Ch. 6 (C)
Oct 11 <sup>th</sup> : Regression Mertler Ch. 7	Oct 13 <sup>th</sup> : Regression Mertler Ch. 7 (P)

Oct 18 <sup>th</sup> : Regression Mertler Ch. 7	Oct 20 <sup>th</sup> : Regression Mertler Ch. 7 (P)
Oct 25 <sup>th</sup> : Regression Mertler Ch. 8	Oct 27 <sup>th</sup> : Regression Mertler Ch. 8 (P)
Nov 1 <sup>st</sup> : Regression Mertler Ch. 8	Nov 3 <sup>rd</sup> : Regression Mertler Ch.8 (C)
Nov 8 <sup>th</sup> : Factor Analysis Mertler Ch. 9	Nov 10 <sup>th</sup> : Factor Analysis Mertler Ch. 9 (P)
Nov 15 <sup>th</sup> : Factor Analysis Mertler Ch. 9	Nov 17 <sup>th</sup> : Factor Analysis Mertler Ch. 10 (P)
Nov 22 <sup>nd</sup> : Factor Analysis Mertler Ch. 10	Nov 24 <sup>th</sup> : Thanksgiving Holiday No Classes
Nov 29 <sup>th</sup> : Factor Analysis Mertler Ch. 10 (C)	Dec 1 <sup>st</sup> : Class Workday
Dec 6 <sup>th</sup> : Course Wrap-up and Conclusions	Dec 8 <sup>th</sup> : Class Presentations
Dec 13 <sup>th</sup> : <b>Finals Week</b> No Class	Dec 15 <sup>th</sup> : <b>Final Meeting</b>

(P) Indicates a problems set will be handed out.

(C) Indicates a critique will be assigned

\*\* Schedule is subject to change.