

**Sociology 6620**  
**Analysis and Interpretation of Sociological Data I**  
Fall 2009  
Tuesday and Thursday 2:00am-3:15am  
114A Baldwin Hall

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Office hours: Thursday 3:15-4:15

In this course you will learn to interpret, calculate, and critique the basic statistics that serve as the building blocks for quantitative sociology. These skills will be valuable in your efforts to understand social phenomena and research. Whether or not you plan to learn statistical techniques above and beyond those required in our Ph.D. program, you will continue to use the skills learned in this course for many years to come.

The course is divided into four major sections. In the first section, we will discuss univariate statistics (e.g., mean, median, mode, standard deviation) as well as bivariate analysis with crosstabs. The second part of the course focuses on inferential statistics and the logic behind sampling. In the third part of the course we will examine statistical tests that allow us to compare groups and test hypotheses. In the fourth and final part of the course, we will learn about bivariate and multiple regression.

Throughout the course, we will be using a statistical program called Stata to manipulate data and calculate statistics. Stata may seem a bit foreign at first, but it is not difficult to use. Its offering of advanced statistical procedures and its ability to incorporate user-written programs make it a very popular program among social scientists. The program and the manuals are available in the computer lab in 219 Baldwin. There are also numerous help files available on-line.

The following pages provide a general but flexible outline for the course. If we need to deviate from this plan, I will announce the changes during class.

**Required Readings**

Frankfort-Nachmias, Chava and Anna Leon-Guerrero. 2006. *Social Statistics for a Diverse Society*. 4<sup>th</sup> Edition. Thousand Oaks, CA: Pine Forge Press. (Abbreviated below as SSDS)

Allison, Paul D. 1999. *Multiple Regression: A Primer*. Thousand Oaks, CA: Pine Forge Press. (Abbreviated below as MR.)

Chen, X., Ender, P., Mitchell, M. and Wells, C. (2003). *Regression with Stata*, from <http://www.ats.ucla.edu/stat/stata/webbooks/reg/default.htm>. (Abbreviated below as RWS)

Stata Annotated Output (Abbreviated below as SAO)  
<http://www.ats.ucla.edu/stat/stata/output/default.htm>

### Participation (10% of grade)

I will assign reading and/or practice problems for most classes. When we meet, your job is to discuss and apply the readings and share your answers to the practice problems. These forms of participation will be worth 10% of your overall grade, and all of them should be a collaborative effort. Participation will be evaluated as indicated in the table below.

		Quality	
		High	Low
Quantity	High	A	C
	Low	B	D

### Exams (90% of grade)

The rest of your grade in the course will be based on three take-home exams, each of which is worth 30% of your overall grade. You will have approximately one week to complete each exam, and although you may use your notes and our textbooks as references, you must complete the exams independently without help from anyone else. All exams must be typed.

### Grades

We will use UGA's plus / minus grading system. Grades will be assigned as outlined below.

100 to 93=A	89 to 88=B+	79 to 78=C+	69 to 68=D+
92 to 90=A-	87 to 83=B	77 to 73=C	67 to 63=D
	82 to 80=B-	72 to 70=C-	62 to 60=D-
			59 and below=F

### Disabilities

If you have a disability and would like to request classroom or other accommodations, please contact me. You may also want to review the services available on campus.

(For more information, see: <http://www.dissvcs.uga.edu/>)

### Academic Honesty

All academic work must meet the standards contained in "A Culture of Honesty" (see especially section 7). Students are responsible for informing themselves about those standards before performing any academic work. (For more information, see: <http://www.uga.edu/honesty/>)

### Withdrawing from the Course

If you plan to withdraw from this course, you should be aware of regulations regarding withdrawals. (For more information, see: <http://www.franklin.uga.edu/students/withdraw.htm>)

### Grievances

Any student who feels that he or she has not been treated in a fair or professional manner should refer to the department's human rights statement. (For more information, see: [http://uga.edu/soc/graduate/pdf/Human\\_Rights\\_Statement.pdf](http://uga.edu/soc/graduate/pdf/Human_Rights_Statement.pdf))

### Discrimination and Sexual Harassment

Any student who feels that he or she has been discriminated against or sexually harassed in any class should contact the UGA Equal Opportunity Office. (For more information, see: <http://www.uga.edu/eoo/>)

	<b>Date</b>	<b>Topic</b>	<b>Book</b>	<b>Chapter</b>	<b>Exams</b>	
Aug.	18	Tues.	Course Overview			
<b>Descriptive Statistics and Crosstabulation</b>						
Aug.	20	Thurs.	Variables & Levels of Measurement	SSDS	1	
Aug.	25	Tues.	Frequency Distributions	SSDS	2	
Aug.	27	Thurs.	Making Graphs and Tables	SSDS	3	
Sept.	1	Tues.	Measures of Central Tendency	SSDS	4	
Sept.	3	Thurs.	Measures of Variability	SSDS	5	
Sept.	8	Tues.	Cross-tabulation	SSDS	6	
Sept.	10	Thurs.	More on Cross-tabulation	SSDS	6	
<b>Inferential Statistics: An Introduction</b>						
Sept.	15	Tues.	The Normal Distribution	SSDS	9	
Sept.	17	Thurs.	The Normal Distribution	SSDS	9	
Sept.	22	Tues.	Sampling Distributions	SSDS	10	
Sept.	24	Thurs.	Sampling Distributions	SSDS	10	
Sept.	29	Tues.	Confidence Intervals	SSDS	11	
Oct.	1	Thurs.	Confidence Intervals	SSDS	11	Exam 1 Distributed
<b>Inferential Statistics: Hypothesis Testing</b>						
Oct.	6	Tues.	Differences between Two Groups	SSDS	12	
Oct.	8	Thurs.	Differences between Two Groups	SSDS	12	Exam 1 Due in Class
Oct.	13	Tues.	Chi-Square	SSDS	13	
Oct.	15	Thurs.	Analysis of Variance (ANOVA)	SSDS	14	
Oct.	20	Tues.	Analysis of Variance (ANOVA)	SSDS	14	
<b>Inferential Statistics: Correlation and Regression</b>						
Oct.	22	Thurs.	Correlation & Bi-variate Regression	SSDS	8	Exam 2 Distributed
Oct.	27	Tues.	Correlation & Bi-variate Regression	MR	5	
Oct.	29	Thurs.	Introduction to Multiple Regression	MR	1-2	Exam 2 Due in Class
Nov.	3	Tues.	Estimating a Multiple Regression	SAO	regression	
Nov.	5	Thurs.	Non-linear Relationships	MR	8	
Nov.	10	Tues.	Categorical Predictors	RWS	3.0-3.4	
Nov.	12	Thurs.	Potential Problems	MR	3	
Nov.	17	Tues.	Assumptions of Multiple Regression	MR	6	
Nov.	19	Thurs.	Regression Diagnostics	RWS	2.0-2.5	
Nov.	24	Tues.	THANKSGIVING BREAK			
Nov.	26	Thurs.	THANKSGIVING BREAK			
Dec.	1	Tues.	Presenting Regression Results			
Dec.	3	Thurs.	Review (last day of class)			Exam 3 Distributed
Dec.	10	Thurs.	NO CLASS			Exam 3 Due in My Box