Quantitative Data Analysis
Course #: 034:010
Spring Term 2006
T, TH 8:05 - 9:20 am
W181 John Pappajohn Business Bldg

Instructor: Mary Noonan
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Office Hours: T 12:00 – 1:30, TH 9:30-11:00 (or by appt)

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Course Description

This course introduces you to three important aspects of statistics: (1) data collection - including opinion polls, surveys, experiments, and sampling; (2) data description - graphical and numerical procedures for summarizing data; and (3) data analysis - using data to make decisions, predictions, and draw inferences.

Class Meetings

The class consists of two 75-minute lectures per week. It is very important that you attend all lectures. Office hours are designed to complement, not replace, lectures. During the semester we will occasionally meet in the Sociology Computer Lab (W13 Seashore Hall). Basic computer training and instructions for using SPSS, a statistical software package, will be given at these times. Dates for these sessions will be announced during the semester.

Textbook and Supplies

The text for this course is: Chava Frankfort-Nachmias and Anna Leon-Guerrero. 2005. Social Statistics for a Diverse Society. Fourth Edition. Thousands Oaks, CA: Pine Forge Press. The text is available at University Book Store, located at the Iowa Memorial Union.

Although a calculator with simple arithmetic and memory functions is adequate, a scientific or statistical calculator is recommended (e.g. y^x and x^2 keys). Students should also obtain a disk/CD/memory stick for use in the computer classroom sessions. Alternatively you can e-mail your SPSS output to yourself as an e-mail attachment.

Computer Resources

The course web page is http://www.uiowa.edu/~c034010**.**

It contains the course syllabus, homework assignments, answers to homework assignments, practice problems, and study guides for exams. Occasionally, I will post tips to homework assignments on the web page.

We will be using SPSS to analyze the data that accompanies your textbook (see pocket in back of book). SPSS software is available in nearly all of the ITCs on campus. If you are interested in purchasing SPSS software for your personal computer, let me know and I can help you order it (cost is approximately $100). **The CD that accompanies your textbook contains the SPSS data sets, not the SPSS software**.

Exams and Assignments

It is extremely important that you keep up with the course material. The study of statistics is cumulative; later material builds on earlier material. It is expected that you have completed the reading assignments before coming to class.

Your final grade is based on two in-class exams, a final exam, and problem sets. The weight of each will be as follows:

First Exam	15%
Second Exam	20%
Final Exam	30%
Problem Sets	35%
Total	100%

Final grades will be assigned according to the following point breakdowns:

97-100 points	A+	87-89 points	B+	77-79 points	C+	67-69 points	D+
93-96 points	A	83-86 points	B	73-76 points	C	63-66 points	D
90-92 points	A-	80-82 points	B-	70-72 points	C-	60-62 points	D-
						0-59 points	F

The first exam will cover material from the beginning of the course. The second exam will cover material since the first exam. The final exam is cumulative, although material covered since the second exam will be given more emphasis. All exams are quasi-open book. You will be allowed to consult 1 page of notes (single-side; 8 ½ X 11 inches) and a calculator during exams. **I do not give make-up exams.** If you anticipate having a problem making it to an exam, you should drop the course now. If you miss an exam due to illness or an emergency contact me by phone or e-mail as soon as possible (See University of Iowa's policy on "Excused Absences from Examinations").

Problem sets are designed to help you learn by doing. Problem sets are available on the course web page and are due at the beginning of class on the day indicated in the syllabus. **No late problem sets will be accepted. In calculating your final problem set grade, I will drop the completed assignment with the lowest score and average the rest. Zeros you receive for not turning in problem sets will not be dropped.** For problem set assignments, you may consult your classmates on problem solving strategy; however, you must solve all problems on your own. Sharing solutions and copying will be considered plagiarism and appropriate action will be taken. **Problem sets may be handwritten, but it is up to you**

to make sure all answers are neat and legible. If your handwriting is not extremely neat, please type your answers.

Other Considerations

(1) Academic accommodation. If you have a disability that may require some modification of seating, testing, or other class requirements, please notify me after class or during my office hours so that appropriate arrangements can be made.

(2) Procedure for student complaints. If anyone is faced with an issue regarding this class that they feel they cannot resolve by speaking with me, please contact Michael Lovaglia, the Department of Sociology Executive Officer.

(3) During lectures, I expect that you will demonstrate respect to me and other students by paying attention and by avoiding activities that could distract me and/or others in the class. In particular, it is not acceptable to for students to sleep, read, converse with others, or use cell phones during class.

Tentative Schedule of Topics, Readings, and Assignments

Date	Topic	Reading	Assignment
Jan 17 T	Introduction		
Jan 19 Th	What and Why of Statistics	Chap 1	
Jan 24 T	What and Why of Statistics	Chap 1	
Jan 26 Th	Frequency Distributions/SPSS	Chap 2/ SPSS	
Jan 31 T	Graphic Presentation	Chap 3	Problem Set #1 Due
Feb 2 Th	Graphic Presentation	Chap 3	
Feb 7 T	Measures of Central Tendency	Chap 4	
Feb 9 Th	Measures of Central Tendency	Chap 4	
Feb 14 T	Measures of Variability	Chap 5	Problem Set #2 Due
Feb 16 Th	Measures of Variability	Chap 5	
Feb 21 T	Catch-up and Review		
Feb 23 Th	****** Exam 1 ******		
Feb 28 T	Cross-Tabulation	Chap 6	
Mar 2 Th	Cross-Tabulation	Chap 6	
Mar 7 T	Cross-Tabulation	Chap 6	
Mar 9 Th	Bivariate Regression and Correlation	Chap 8	Problem Set #3 Due
Mar 14 T	No Class, Spring Break		
Mar 16 Th	No Class, Spring Break		
Mar 21 T	Bivariate Regression and Correlation	Chap 8	
Mar 23 Th	Bivariate Regression and Correlation	Chap 8	
Mar 28 T	Bivariate Regression and Correlation	Chap 8	
Mar 30 Th	Class Cancelled		Problem Set #4 Due
Apr 4 T	Normal Distribution	Chap 9	
Apr 6 Th	Normal Distribution/Review for exam	Chap 9	
Apr 11 T	****** Exam 2 ******		
Apr 13 Th	Sampling and Sampling Distributions	Chap 10	
Apr 18 T	Sampling and Sampling Distributions	Chap 10	
Apr 20 Th	Estimation	Chap 11	
Apr 25 T	Estimation	Chap 11	Problem Set #5 Due
Apr 27 Th	Testing Hypotheses	Chap 12	
May 2 T	Testing Hypotheses	Chap 12	Problem Set #6 Due
May 4 Th	Testing Hypotheses	Chap 12	

Problem Set #7 Due on Tuesday May 9th at 10 am.

****** Final Exam is held on Thursday, May 11th: 2:15-4:15 pm ******