

SOC356

Social Research II
Tuesday, Thursday 4-5:15, Tarbutton XXX

Spring 2000

Instructor:

Dr. Kathryn Yount

Phone: 404-727-8511

Email: kyount@sph.emory.edu

Office: Tarbutton 202, RSPH 724

Office hrs (T202): Th 2:30-4

Teaching Assistant:

Ms. Kendyl Montgomery

Phone:

Email: kamontg@emory.edu

Office: Tarbutton 202

Office hrs (T 202): Tu 2:30-4

COURSE OBJECTIVES AND DESCRIPTION

This course provides an introduction to basic statistical techniques commonly used by social scientists and other professionals who are involved in research. Topics to be covered include summarizing evidence with graphs and numbers, generalizing from a sample to a population as in opinion polls, and determining the relationship between two or more variables. The course will prepare you to understand research reports in scientific publications and in the news media, and to evaluate the adequacy of the conclusions reached. It will also enable you to do original research in other courses, in student organizations, and on the job. You will learn how to ask meaningful research questions and to draw sound conclusions from the evidence that you produce. By the end of the course, you should have acquired “statistical literacy” – a skill that will be invaluable to your current academic life and future career.

Our focus in this course is on using and interpreting statistics, not on the mathematical proofs underlying the statistics we use. Therefore, no special mathematical background or aptitude is required for the course, although a tolerance for basic arithmetic and some familiarity with high school algebra will be helpful. Some experience with computers is required, and some knowledge or willingness to learn computer software packages such as MS Power-point and STATA is expected.

TEXTS AND MATERIALS

All of the following are available at the university bookstore or on reserve.

1. *Statistical Methods for the Social Sciences*, 3rd edition, by Alan Agresti and Barbara Finlay (noted in schedule as “A”)
2. *Hands on Sociology*, Revised and Expanded Edition by William Feigelman (noted in schedule as “F”)
3. *Readings in Social Research Methods* by Diane Kholos Wysocki (noted in schedule as “W”)

Note that since only a few readings are required from the Wysocki text, this book will be on reserve with the teaching assistant. You will also need a calculator and a 3.5” diskette for storing computer files. **ALWAYS BRING BOOKS, CALCULATOR, AND DISKETTE WITH YOU TO CLASS.**

COURSE REQUIREMENTS

You are expected to do all assigned reading once before class, and are highly recommended to read the assigned reading again after lecture to maximize your understanding of the material.

Each chapter of the Agresti text includes a set of practice problems. These problems will not be assigned and graded, but I encourage you to review them, as they will help you considerably to master the material of the course. Problems may be reviewed with the SOC356 teaching assistant during office hours as long as other students do not require teaching assistance with assigned work.

There are 200 possible points that you can earn during the semester, which will be divided as follows:

4 computer exercises	@ 100 point (25 points each)
2 non-cumulative quizzes	@ 60 points (30 points each)
1 short research project	@ 40 points

Readings: Readings are assigned that provide examples of some of the concepts that will be discussed in class. Readings will be discussed in class only as time permits. Nevertheless, these readings are required to the extent that questions on an in-class quiz may be based on content from the readings.

Computer Exercises: 10 laboratory assignments, each worth 10 points, will come from selected chapters in *Hands on Sociology* and will be administered during class. These assignments will assess your ability to interpret statistical results using STATA, a popular statistical software package used at top universities and private businesses worldwide. Computer assignments will begin in class; however, students may need to complete these assignments as homework. All necessary step-by-step instructions and questions for each assignment are provided in the exercise book *Hands on Sociology*. As long as you follow the written instructions, you should have no trouble completing the assignments. Before the semester ends, you will be able to conduct your own computer-based research, and may consider adapting one of the exercises for your research project (described below).

Completed assignments are to be turned in to the teaching assistant before the beginning of the next class period. A complete and correct computer assignment receives full credit. 5 points will be deducted for any late assignment. Computer assignments that are more than one week late will not be accepted and will receive a grade of 0. While students may work on assignments in groups, each student must turn in an individual write-up of their computer assignment.

Quizzes: Two non-cumulative quizzes will be administered during the semester. Each quiz will be worth 30 points. Quizzes will test your understanding of basic statistical concepts, your ability to solve statistical problems by hand, and/or your ability to interpret empirical results. Quizzes will be closed-book, in-class, multiple-choice or short-answer exercises.

Short Research Project: The “final exam” for this course will take the form of an independent research project that will be presented in class. The presentation should simulate one given by a professional at the American Sociological Association Annual Meeting or a professional involved in research and development in private industry. The project may be completed and presented at any time during the second half of the semester (after spring break), and dates for presentations will be determined on the first day of class following spring break.

For the research project, students should do the following:

1. Identify a research question
2. Summarize the relevant literature (theoretical and empirical)
3. Develop a hypothesis based on the literature review
4. Test this hypothesis using appropriate statistical techniques discussed in class
5. Summarize results in the form of tables and graphs
6. Present all of the above to the group in a 15-20 minute presentation

Students may elect to develop a research project from one of the computer assignments, and ideas for such research projects are presented at the end of each chapter in *Hands on Sociology*. Otherwise, students may elect to develop a research project from one of the non-completed exercises in the same text.

In either case, the project should follow the format above and should extend beyond the regular computer assignment. Students should browse this text well in advance of spring break to select a topic of interest. Regarding the literature review, it need not be exhaustive, but should be based on a reasonable search of the available books and journals in the Emory library (the teaching assistant will assist you with initiating a search). As a guide, the literature search should include the seminal articles/books on the topic as well as some of the most recent empirical findings. A brief annotated bibliography¹ that demonstrates your search efforts should be turned in on **THE FIRST DAY AFTER SPRING BREAK**. 5 points will be deducted from the final grade of the research project if the annotated bibliography is turned in late – 10 will be deducted if no annotated bibliography is turned in.

Students are strongly recommended to use Microsoft PowerPoint for their presentation, and to turn in one copy of their presentation for grading to the teaching assistant.

GRADING SYSTEM

A	95-100
A-	90-94
B+	87-89
B	84-86
B-	80-83
C+	77-79
C	74-76
C-	70-73
	Etc

¹ An annotated bibliography is a brief (one paragraph) summary of the research design and findings of an empirical piece, or of the central themes of a theoretical piece.

TOPICAL OUTLINE AND READING ASSIGNMENTS

The schedule below provides a general “map” of the topics that will be covered each week. The schedule may change depending upon the pace of the group, so students should not be surprised by revisions.

Week of	Topic	Readings
1/18	Introduction to Social Research: Research questions, hypotheses, and causality LAB 1: Using STATA	A: Ch 10, to 371 W: Ch 2 F: Ch 1-2
1/23	Introduction to Social Research: Principles of statistical analysis, sampling and measurement	A: Ch 1-2 W: Ch 7
DESCRIPTIVE STATISTICS		
1/30	Summarizing one variable using tables and graphs Measures of “average” and “spread” of continuous variables LAB 2: Analyzing the correlates of abortion attitudes	A: Ch 3 A: Start Ch 4 F: Ch 3 ²
2/6	Probability Distributions	A: Ch 4
STATISTICAL INFERENCE: UNIVARIATE ANALYSIS		
2/13	Estimating population values	A: Ch 5
2/20	Testing hypotheses about one variable QUIZ 1	A: Ch 6 ³
STATISTICAL INFERENCE: BIVARIATE ANALYSIS		
2/27	Comparing two groups Comparing multiple groups: Analysis of Variance GROUP LAB on ANOVA 2/29	A: Ch 7 ⁴ A: Ch 12, 438-45 F: Ch 15, 171-74
3/6	Association between nominal/ordinal variables: Cross-tabulation LAB 3: Culture and Ethnic Diversity Research topic selected	A: Ch 8 F: Ch 4 ⁵
3/13	SPRING BREAK NO CLASS!	
3/20	Cross-tabulation (continued) LAB 4: Examining the Correlates to Youth Risk-Taking Behavior ANNOTATED BIBLIOGRAPHY DUE!	A: Ch 8 F: Ch 13

² This lab will be completed in class, since some questions refer to material that will not yet have been covered.

³ Less emphasis may be placed on sections 6.6 and 6.7, depending upon the time.

⁴ Skip section 7.4

⁵ Questions 39 and 40 will be discussed in class, since they refer to material that will not yet have been covered.

TOPICAL OUTLINE AND READING ASSIGNMENTS (continued)

Week of	Topic	Readings
3/27	Association between two continuous variables: Linear Correlation 3/29 is a review	A: Ch 9 F: Ch 15, 175-81
4/3	Simple linear regression Review SLR and principles of “causality”	A: Ch 9 F: Ch 15, 175-8 A: Ch 10
4/10	QUIZ 2 Two-variable linear regression and stratification by another variable (“statistical adjustment”)	A: Ch 11, 382-402 F: Ch 6
4/17	In-class preparation of projects, review, and catch-up	
4/24	In-class presentations	