Quantitative sociological methods

Sociology 106

Spring 2017

Instructor: Felipe Dias (felipedias@berkeley.edu)

Office Hours: Thursdays, 11:00am-12:00noon, 477 Barrows (or by appointment).
Office Hours Sign up: https://www.wejoinin.com/sheets/sdric

Class Meetings: Tuesdays, 4:10pm-6:00pm, 475 Barrows Hall.

Course description and learning goals

Sociology 106 is an intermediate undergraduate methods course. Students will learn the fundamentals of social scientific research, with the emphasis on research design, data collection, and interpretation of statistical methods. The course will train students in the use of STATA for data management and analysis. Sociology 106 is most appropriate for students who wish to learn how to carry out a quantitative research project. After successfully completing this course, you will be able to:

1. Understand the basic logic of statistical inference
2. Identify the appropriate statistical test given a specific type of data
3. Compute descriptive statistics, graphs, tables, and simple statistical tests using Stata
4. Interpret the results of statistical tests and discuss their relevance to a particular research question.

Prerequisites

Previous training in statistics in neither required nor expected. Successful completion of Sociology 5 is a requirement for this course, but other courses that provide an introduction to social science research methods may also suffice. If you have not taken Sociology 5, contact the instructor to obtain permission to enroll.

Required course materials

There is one required textbook for the course.

Longest, Kyle C. *Using Stata for Quantitative Analysis*. 2nd Edition. Sage Publications

The recommended textbooks are:

Weiss, Neil A. I*ntroductory Statistics* 10th Edition. Pearson Addison Wesley

Babbie, Earl R. *The Practice of Social Research*. 13th Edition.

Course requirements

Lecture: Attendance and active participation in lecture is essential. If you miss more than one lecture or lab session, your highest possible grade will be A-; if you miss more than two lectures, your highest possible grade will be a B+; etc. If you miss more than four lectures and labs combined, you will receive a failing grade for the course. Life happens, so it is understandable that students might have to miss lecture because of unforeseen emergencies. In such cases, students need to let the instructor know as soon as possible the nature of the emergency, as well as provide some form of documentation (e.g. doctor's note) so that the absence can be excused. If documentation is difficult to obtain, please consult with instructor.

Annotated Bibliography Assignment: In this assignment, students are expected to identify 10 scholarly sources (peer-reviewed articles from scholarly journals, books, and book chapters from edited volumes, but NOT from blogs, internet/newspaper articles, and Wikipedia) related to your research question. After identifying the 10 sources, you will write an annotated bibliography, which essentially describes how the source relates to your research question. This includes, but are limited to, the overall argument in the article/book, the types of evidence that the author(s) use to support their article, any possible weaknesses/strengths in the paper. I will provide more information about this assignment during class. **Late assignments will receive a grade reduction (e.g. from A to A-, from B+ to B) each day it is late. After one week (7 days), the student will receive an F for the assignment.** Due March 7.

Research Report Assignment: This is one of the major assignments in the course (worth 30 percent). In this assignment, you will 1) discuss your research question, 2) how prior scholarly work has answered the research question, 3) the statistical method that you used in your analyses, 4) the data analyses, and 5) conclusions. More information about this assignment will be given in class. This assignment is due on April 25. **Late assignments will receive a grade reduction (e.g. from A to A-, from B+ to B) each day it is late. After one week (7 days), the student will receive an F for the assignment.**

Midterm and Final Exam: The midterm and final exam are intended to make sure that students have a comprehensive understanding of the conceptual material from the course. Each are worth 15 percent of the grade.

Attendance and Participation: 15%
Annotated Bibliography Assignment (**Due March 7**): 20%
Research Report Assignment (**due April 25**): 30%
Homework Assignments: 5%
Midterm: 15%
Final Exam: 15%

A note on Plagiarism. Plagiarism is very bad. Don't do it. It's not worth it. Plagiarism is representing the work of others as your own (including copying other students' work or using Internet resources without proper citation). Any case of plagiarism or academic misconduct (cheating, etc) will result in automatic failure of this course. Additionally, an incident report or complaint will be sent to appropriate offices at Cal. More information on academic misconduct and plagiarism can be found at http://students.berkeley.edu/osl/sja.asp. If you have questions

about how to avoid plagiarism, please see me. For more information on citations and avoiding plagiarism, see http://www.lib.berkeley.edu/TeachingLib/Guides/Citations.html.

Data for Assignments and Final Paper

Students will work with one dataset of their choice to do the assignments and the final paper. Please consult with the instructor as you choose your dataset. Below are some online repositories where data are available:

        sda.berkeley.edu/archive.htm
        icpsr.umich.edu/icpsrweb/ICPSR/access/in
        dex.jsp norc.uchicago.edu/GSS+Website/
        thearda.com/Archive/browse.asp
        www.census.gov
        www.ropercenter.uconn.edu/

Schedule

Week	Date	Topic	Weiss	Babbie
1	1/17	Course Introduction	Ch. 1.1; Ch. 2.1-2.2	
2	1/24	Research Overview I: Research Design		Chapter 4 (bcourses)
3	1/31	Research Overview II: Conceptualization, Operationalization, and Measurement		Chapter 5 (bcourses)
4	2/7	STATA Workshop (Read Chapter 2 and Chapter 3 in Kyle C. Longest book)		
5	2/14	What are we seeing? What does it tell us? Research Question Assignment Due in class	Ch. 3; Ch. 1.3-1.5; 2.3-2.6	
6	2/21	How do we Know if differences matter? (probability)	Ch. 4.1-4.3	
7	2/28	The Normal Distribution and Z-scores	Ch. 6.1-6.3; Ch.7	
8	3/7	T-Distribution, One-Sample T-tests, Critical Values **Annotated Bibliography Assignment Due in class**	Ch. 8	
9	3/14	**Midterm**		
10	3/21	Determining Differences by groups: Population Means and Population Proportions	Ch. 9, Ch. 10, Ch.12	
11	3/28	No Class-Spring Recess		
12	4/4	Understanding Relationships I (Chi-Squared Procedures) Data Source Assignment Due in class	Ch. 13	
13	4/11	Understanding Relationships II (Regression I)	Ch. 14	
14	4/18	Understanding Relationships III (Regression II)	Ch. 15	
15	4/25	Students Presentations **Research Report Assignment Due in class**		
16	5/2	RRR Week		
17	5/9	**Final Exam**		