

Soc 46B: Introduction to Social Research - Data Analysis, Spring 2017

Tuesday & Thursday, 2:10-4pm, Young Hall 194

Professor:

Prof. Ryan Finnigan

rfinnigan@ucdavis.edu

Office Hours

SS&H 2259

Tues. 11am-1pm, and by appointment

Teaching Assistants

Bahareh Abhari (babhari@ucdavis.edu)

Michelle Rossi (micro@ucdavis.edu)

Yiwan Ye (ywye@ucdavis.edu)

Office Hours

TB 206, Tues/Thurs 4-5pm

SS&H 284, Tues. 10am-12pm

SS&H 286, Tues/Thurs noon-1pm

Lab Sections

A01: Rossi	Friday 9-9:50am	Sciences Lab Building 2060
A02: Rossi	Friday 10-10:50am	Sciences Lab Building 2060
A03: Abhari	Friday 11-11:50am	Sciences Lab Building 2060
A04: Abhari	Friday 12:10-1pm	Sciences Lab Building 2060
A05: Ye	Friday 1:10-2pm	Sciences Lab Building 2060
A06: Ye	Friday 2-2:10pm	Sciences Lab Building 2060

Course Description

Sociological understandings of society and inequality can only be as good as the data they rely on. So how do we know what we know when relying on statistical information? Soc 46B introduces methods for analyzing quantitative data to help answer this question, with specific applications to classic research questions on poverty, inequality, and social mobility. We can understand quantitative information better when we know where it comes from.

Soc 46B covers the relevance and practice of quantitative data analysis, the presentation of quantitative information, probability and uncertainty, basic statistical inference, and hypothesis testing. The course teaches both how to calculate relevant statistics, and to read and interpret quantitative sociological articles. Specifically, Soc 46B aims to fill [UCD requirements for learning quantitative literacy](#). The course also provides a foundation for more advanced quantitative methods courses, like Soc 106.

Required Reading

Required readings, listed on the course calendar below, are posted to Canvas. *A non-graphing hand calculator required is for in-class exercises and exams.*

Related Reading

[Diez, Barr, and Çetinkaya-Rundel. 2015. *OpenIntro Statistics, Third Ed.*](#)

This free textbook will supplement the lecture material. OpenIntro is a collaborative project of educational professionals designed to provide free and open source textbooks and other educational materials. A free pdf copy of the text is available at the link above.

Evaluation

Homework assignments (4 x 15%)	60%
Lab exercises	10%
Midterm exam	15%
Final exam	15%

The homework assignments apply course concepts to research questions and quantitative data. Each assignment includes hand calculations and analysis from a computer program for statistical analysis (Stata). The Stata portions of the homework can be completed in the weekly lab sessions. Please show your work, including the computer output. The assignments will be distributed well in advance of the due date, *so no extensions will be given except for extreme situations*. Please attempt the homework assignments on your own *before* asking questions in office hours!

Paper copies of the homework assignments are due at the beginning of class the day they are due. Assignments can be submitted late with a reduction of 10% per day (each 24 hours from the original submission time).

The weekly lab sessions use Stata, a common computer program for statistical analysis in social sciences. Detailed instructions for each week's activities are posted to Canvas. The lab sessions also have online multiple choice "quizzes" based on the Stata activities *and weekly reading*. The lab sessions should also provide enough time to complete the portions of the homework assignments requiring Stata output. The lab instructors will also be available to answer questions about lecture material.

After-hours lab access can be found [here](#). After-hours virtual access is available [here](#).

The exams are similar to the homework assignments, but shorter. You can make a reference sheet for use on the exam (one side of a single sheet of 8.5" x 11" paper). The final exam will mainly focus on concepts from the second half of the course.

Final Grades

A+ 97 - 100	B+ 87 - 89.9	C+ 77 - 79.9	D+ 67 - 69.9	F below 60
A 93 - 96.9	B 83 - 86.9	C 73 - 76.9	D 63 - 66.9	
A- 90 - 92.9	B- 80 - 82.9	C- 70 - 72.9	D- 60 - 62.9	

Course Expectations

- **Attendance:** Lecture slides will be available on Canvas. You should also take detailed notes from the lectures, particularly the examples! I frequently make important announcements at the beginning of class, so make sure you get these from a classmate if you're not present.
- **Reading:** The course readings are largely published sociological articles, applying course concepts to research questions about inequality. Do not expect to learn how to reproduce these articles, but do expect to learn how to interpret them. The required reading is available on Canvas, and should be completed *before* the corresponding lab section.
- **Lab Sessions/Stata:** Please attend the lab section corresponding to your registration. The lowest score on the weekly lab exercises will be dropped. *No exceptions will be made otherwise.*
- **Academic Integrity:** Group discussion of course topics and material is strongly encouraged. However, your work for course assignments and exams should be your own. Academic misconduct will be reported to Student Judicial Affairs. Please consult the [Code of Academic Conduct](#) for more information.
- **Students with Disabilities:** Please notify me in the first week of the course for for any necessary accommodations. Please also request a letter of verification from the [Student Disability Center](#).
- **Communication:** Please visit office hours with any questions or issues about the material or the course itself *before* it is too late (i.e., the day before an exam or an assignment is due). Please begin the subject line for all emails with "Soc 46B:", and maintain professional email etiquette. Email responses may take a couple days, and email will not be checked regularly during evenings and weekends.
 - *In general, any question or concern requiring a reply longer than a two sentences is best discussed in office hours.*
 - Please double check the syllabus and relevant course documents for answers to course questions.
- **Don't panic!** Statistics can seem abstract and intimidating. But you're exposed to statistics and probability in daily life much more than you realize! When things seem unclear, ask me or the TAs right away. Also, continue to ask questions about topics that remain unclear, even if you've already asked them!

Course Schedule

The schedule is subject to revision throughout the quarter.

	Tuesday	Thursday	Reading
Week 1	Introduction	Sampling and Measurement	<i>Schneider & Harknett (through top of p.10)</i>
Week 2	Data Summary & Visualization	Measures of Central Tendency	<i>Torche (through p.572)</i>
Week 3	Measures of Variation	Probability	<i>Western et al. (through first ½ of p.908)</i>
	Assignment 1 due 4/18		
Week 4	Normal Distribution	Populations and Samples	<i>Pew Report (through p.32)</i>
Week 5	Review	Midterm Exam (5/4)	<i>Practice Exam</i>
	Assignment 2 due 5/2	<i>No lab on Friday 5/5</i>	
Week 6	Confidence Intervals	t-Distribution	<i>Zukin</i>
Week 7	Hypothesis Testing	Hypothesis Testing	<i>Baker</i>
Week 8	Comparing Groups	Comparing Groups	<i>Owens & Pedulla</i>
	Assignment 3 due 5/23		
Week 9	Decision Errors	Correlation	<i>Chetty et al.</i>
Week 10	Review	Review	<i>Practice Exam</i>
	Assignment 4 due 6/6	<i>No lab Friday 6/9</i>	

Final Exam: Friday, June 9, 10:30am-12:30pm