Evaluation of Evidence (Sociology 5) Fall 2019

Professor David Harding

Office: Barrows Hall 462 Email: <u>dharding@berkeley.edu</u> Lecture: Tuesday and Thursday 9:30-11am, F295 Haas Faculty Wing Section: Twice per week either M/W or T/Th Office Hours: Tuesdays 1:00-3:00pm (log in with CalNet ID and sign-up at <u>https://tinyurl.com/hardingOH</u>) Course Website: https://bcourses.berkeley.edu

Course Description

People today are barraged by information - a torrent of facts, opinions, and analyses that appear in books, in newspapers and magazines, on radio stations, through television broadcasts, on computer screens, and on phones. The pressure to make sense of that information has never been greater. This course will introduce you to the major types of data and analysis used by sociologists, and seeks to make students better consumers of social scientific research reported by the media or used in political or policymaking debates. This course will give you an overview of the tools used by social scientists and a framework for understanding what distinguishes good research from bad. By the end of the semester, you will be able to assess the soundness of research by evaluating research designs and data-collection strategies in light of research questions and theory. You will develop this knowledge through evaluating existing research and doing some of your own.

Enrolling in the Course

Each student must be registered for the lecture course and one of the sections listed below:

DIS 101	TuTh 8:00A-8:59A	54 Barrows
DIS 102	TuTh 11:00A-11:59A	61 Evans
DIS 103	TuTh 5:00P-5:59P	61 Evans
DIS 104	TuTh 4:00P-4:59P	47 Evans
DIS 105	TuTh 2:00P-2:59P	45 Evans
DIS 106	TuTh 3:00P-3:59P	71 Evans
DIS 107	MW 8:00A-8:59A	104 Barrows
DIS 108	MW 9:00A-9:59A	174 Barrows
DIS 109	MW 10:00A-10:59A	39 Evans
DIS 110	MW 11:00A-11:59A	45 Evans
DIS 111	MW 1:00P-1:59P	55 Evans
DIS 112	MW 2:00P-2:59P	31 Evans

Note: First section meetings will be Wednesday, Sept, 11 and Thursday, Sept 12.

Waitlist: There is a waitlist for the course. For those enrolled, you must attend lecture the first three classes to confirm your enrollment. I will take attendance. If you are on the waitlist, you must also attend the first three lectures. *You have a better chance of getting into the class if you pick a section with a shorter waitlist.* Please direct enrollment questions to Carmen Brick (carmenbrick@berkeley.edu).

If you would like to be in a different section than the one you are assigned to, please fill out the following form: <u>https://forms.gle/gEeVm5Ta7tRhCa6m6</u>. The GSIs will work with you to try to accommodate your preference. But, there is no guarantee that it will be possible to switch.

Lectures and Active Learning

The lectures will explore the philosophical underpinnings of research design and describe the many different ways of gathering and evaluating evidence. You are responsible for all material discussed in lectures, as well as any announcements made there.

Cognitive science research shows that listening to someone talk for 80 minutes is just about the worst way to learn. Learning requires active engagement with the material: thinking through examples, applying concepts to new circumstances, evaluating options and implementations, designing, problem-solving, doing. In this course we will use what has come to be known as "active learning" (or sometimes "flipping the classroom" – see the reading for the first lecture). We will spend a significant amount of time in lecture doing higher-order cognitive activities/exercises – often in small groups – rather than passively listening. Small group activities are an important context for peer instruction, learning from each other.

In order to facilitate feedback and communication during these activities, we will use online Google Forms (see also Quizzes, below). In order to free up time in lecture that is typically used to cover facts, definitions, and the like, students will be expected to come to lecture already having spent time studying these things. The readings and videos provide this background for you. We will have quizzes in almost every lecture (graded starting in the 5th lecture) to make sure that students come to class prepared for active learning (see more below on quizzes). Some readings will also cover the basics of examples we will use for active learning.

A final benefit of active learning is that it can teach students the basics of learning outside of the classroom – how to learn on your own effectively and efficiently. Modern careers require constant learning of new skills, tools, and ideas but provide few opportunities for formal learning in a classroom setting. Career success requires the modern worker to be able to learn on her or his own. You can employ the active learning strategies we use in this course to become a life-long learner.

Required Readings and Short Videos

The readings offer you the chance to learn how working social scientists actually DO research, especially how they gather data. You are expected to do the assigned reading before class. To help focus your reading, the schedule of classes includes questions to consider for each set of readings. Think through these questions carefully, as they will inform the in-class quizzes, midterm, and final exam.

There is one *required textbook*: Carr et al. *Art and Science of Social Research* (1st Edition) New York: WW Norton.

It is available at the ASUC bookstore. ISBN 978-0393911589. The print (paperback) version is about \$105, the 3-hole-punch loose-leaf version about \$75, the e-book is \$45, and the e-book plus access to the loose-leaf version is \$60. You can purchase the e-book from <u>https://digital.wwnorton.com/socialresearch</u>. You may also be able to find used copies online. I have put copies of the book on 2-hour reserve in Moffitt.

PDFs of the other readings are available on the bCourses site. To accommodate students who are

on the waitlist, all readings for lectures 1-4 are available on bCourses.

Links to short videos that go with (just about) every lecture are below. These videos are a supplement to, rather than a replacement for, the readings. The videos are designed to provide brief introductions to key concepts and ideas before lecture, so we can spend less time in lecture on definitions and facts, leaving more time for active learning and examples.

Course Assignments

Students will be evaluated and graded based on two examinations, four research projects, in-class quizzes, and their participation and attendance at lecture and in discussion section. The table at the end of this section notes the due dates for each assignment and the percentage of the final grade that each assignment is worth.

Exams

There will be two in-class closed-book examinations. The mid-term examination will be held on Tuesday, October 8 during the normal class time. Half of you will take the exam in our normal classroom and the other half will be in another room [location TBD] (we'll split up by last name as the date approaches). The final will be held on Tuesday, December 17, 3:00-6:00pm (location TBD). The final will also cover material from lecture and readings. It will focus on the topics covered after the mid-term, but all course material is eligible for inclusion.

Research Projects

A key part of understanding research methods is through learning-by-doing, that is, applying textbook or lecture knowledge to the real world. Your GSI will instruct you on whether to load projects to bCourses or submit them to your GSI's mailbox in 410 Barrows Hall. Late projects will be graded down a full letter grade for each day late (e.g., An A- becomes a B-). Note that if your GSI instructs you to hand assignments in at 410 Barrows, they will be due there by 4pm; anything submitted after then will be considered a day late (Note that the Sociology Office closes at 4pm). Detailed information on each project will be provided on the course website.

In short, there are three individual assignments (assignments #1, #2, and #3) and one group assignment (assignment #4). You may not submit the group assignment individually. A lot of sociological research is coauthored; doing this final piece of work in a group gives you a sense of what it is like to work on a research team. It also allows you to learn from each other. Your GSI will assign you to your research project group for assignment #4 in section. For this last assignment, you will be graded on both your individual components and collectively on the group component.

Quizzes

Starting with the fourth lecture, there will be a short multiple choice quiz in each lecture. We will use online Google Forms to do the quiz. Research by cognitive psychologists indicates that students should be graded frequently throughout the semester rather than at only a few points in time. Google Forms make this possible in large classes. They also make it possible for me to determine how well you grasp the material so I can spend less time on the concepts you understand well and more time on the challenging ones. This, in turn, leads to more interesting discussions.

It is your responsibility to make sure you have a functioning device such as a laptop, tablet, or

smartphone in every lecture in order to take the quiz. We will drop the four lowest quiz scores. This provides some insurance against absences due to illness and to malfunctioning or forgotten devices. Each quiz will have three questions. Answering at least two of the three questions correctly will be considered an A. This is to lessen the stress of the quizzes. Entering any answer (correct or not) to any quiz question will show you were present in lecture and will be used for recording attendance.

The quizzes are an individual assessment, not a group one. Please remain silent while the quiz is occurring and do not show your screen to other students. Giving or receiving help on the quiz will be considered a violation of the UC Berkeley Honor Code. You may consult the readings or your own notes during the quizzes. In other words, these are "open book, open note" quizzes. However, quiz time for each question will be very brief.

Participation and Section

Sections are an indispensable part of the course. They provide you with opportunities to ask questions about the readings or lectures, and otherwise engage the material actively. Sections are led by Graduate Student Instructors (GSIs). Section meetings and your GSI's office hours are your main points of contact. Each GSI has a mailbox in 410 Barrows.

The course GSIs are:

Carmen Brick	<u>carmenbrick@berkeley.edu</u>
Greg Fayard	<u>gmfayard@berkeley.edu</u>
Kelly Quinn	<u>kellyquinn@berkeley.edu</u>
Emily Ruppel	emily_ruppel@berkeley.edu
Jasmine Sanders	jmsanders@berkeley.edu
Mariah Wood	msw817@berkeley.edu

In consultation with me, your GSI will assign 15% of your grade, based on your participation in section, lecture, and office hours. An obvious condition for effective participation is attendance. Participation involves attending section meetings, contributing to discussions, asking pertinent questions, and answering questions asked by GSIs. The quality of your contribution is far more important than the quantity.

Assignments, Weights, and Due Dates

Assignment	% of Grade	Due Date
Quizzes and Exams		
Quizzes in lecture, drop lowest 4	12%	Take in class
Mid-term Exam	15%	In-class Exam Oct. 8
Final Exam	15%	In-class Exam Dec. 17
Research Projects		
Project 1: Identifying Dependent & Independent	6%	September 24
Project 2: Designing a Survey	12%	October 29
Project 3: Data Analysis	12%	November 15
Project 4: Qualitative Interviewing	13%	December 5
Participation and Attendance	15%	Throughout semester

Course Policies

Readings and Lecture

Students will be responsible for both material in the readings and material covered in lecture. I will post slides from lecture on the bCourses site. However, these slides are designed to be rhetorical aids and not comprehensive records of all that was said in class. Please do all of the readings and watch videos in a timely fashion. Each lecture date has one or two readings and at most a few short videos associated with it. It will be difficult to participate in active learning exercises in lecture if you have not done the readings and watched the videos. At some point during almost every lecture (starting with lecture 5) there will be a short graded quiz to test your preparation for lecture.

Accommodation

I will provide accommodation to any student who provides me with a written letter from a DSP Specialist. If you require accommodation, the first step is to have DSP send me an official written accommodation letter. Once I receive this letter and if I have any questions, I will contact you by email. Please arrange for me to receive the letter as early in the semester as possible. Arrangements for DSP Accommodations that require an alternative testing location or more time should be made with Gregory Fayard (gmfayard@berkeley.edu).

I will also provide accommodation for observation of religious rituals. University policy is that such requests should be made by the second week of the semester. Please submit them by email, cc'ing your GSI.

Late Work

There are several written assignments for this course. The precise due dates and where the assignments should be handed in are noted above. Assignments turned in late will be penalized one letter grade for every day late (e.g. one day late makes a B a C). If you have a real emergency, email the Professor and your GSI about it at least 24 hours before the deadline. Exams will be given on the posted dates. If you know now that you will have a conflict with the scheduled exam times, either do not take this course or speak with me as soon as possible so that we can work out an accommodation. If you have a true unforeseen emergency that prevents you from attending the exam, contact me and your GSI as soon as possible to discuss an accommodation.

Grading Policy

If you wish to contest a grade, please first speak with your GSI and outline in writing (1) what assignment you are contesting, (2) the grade you received on the assignment, and (3) the reason(s) why you believe the grade you received is unfair. The GSI will consider your appeal and, in consultation with the Professor, may decide to re-grade your assignment. Please note, however, that a re-grade likely involves closer scrutiny of the work and so may result in an increase or a decrease in your grade. Whatever the outcome, the score from the re-grade will be final. The grade appeals process should be initiated within seven days of receiving the grade in question.

Academic Honesty¹

The UC Berkeley Honor Code states that, "As a member of the UC Berkeley community, I act with honesty, integrity, and respect for others." (<u>https://teaching.berkeley.edu/berkeley-honor-</u>

¹ Text is adapted from the ASUC honor code guide.

<u>code</u>) I expect that you will adhere to these principles in your conduct in the course. You may not copy specific text or ideas from others, whether from fellow students, from authors of our readings, or from authors of material you find on the internet, without specific attribution. To do otherwise is to plagiarize. You may not cheat on any of the exams by bringing in outside material, copying from fellow students, or engaging in other dishonest practices. You may of course discuss the lectures and readings with your fellow students. But, the assigned papers, in-class quizzes, and your written responses to exam questions must reflect your own independent work. Violations of these rules will result in a failing grade on the assignment and possibly on the course and may result in you being reported to University authorities. Submitting responses on a Google Form on behalf of someone else is considered cheating.

Email

Email should not be used for substantive questions about the reading or course materials. Please ask such questions in class or sign-up for office hours. I will endeavor to respond to other email messages within 24 hours. Please wait 24 hours before emailing me a second time about the same issue.

Office Hours

I very much encourage you to sign-up for office hours. You may also just "stop-by" my office during office hours and if I don't have another student scheduled, I'll be happy to talk with you. Office hours are a good time to just introduce yourself, to talk about ideas that you find particularly engaging or difficult, or to discuss problems that you may be having in the course. Your GSI will also hold office hours.

Technology Policy

You are encouraged to use a laptop or tablet during class for the purpose of note taking or consulting the readings. Please do not use your cell phone during class (except for attendance during the first three lectures or for daily quizzes). Please do not text, chat, surf the web, read the news, or watch videos during class! This behavior is distracting to other students sitting around you. I have asked the GSIs to (politely) ask students who are not engaged in class-related activities on their laptops to stop.

Course Outline with Readings and Videos

1. Thursday, August 29: Overview of the Course & Logistics

What are the goals of this course? What is Active Learning? What do I have to do to get a good grade? What should I do if I'm on the wait list?

Reading: Brame, "Flipping the Classroom" (<u>https://cft.vanderbilt.edu/guides-sub-pages/flipping-the-classroom/</u>)

2. Tuesday, Sept 3: What is Science? What is Sociology?

What is social science? What does science do?

Reading: Textbook, Chapter 1. The Art and Science of Social Research: An Introduction Videos:

- Variables: <u>https://www.youtube.com/watch?v=beoGv6U0qaM</u>
- Unit of Analysis (first 3:30 minutes): <u>https://www.youtube.com/watch?v=hyfcs62JX6U</u>

3. Thursday, Sept 5: The Creation of Sociological Knowledge

How is scientific knowledge organized? What are the elements of scientific theories? How does scientific knowledge evolve?

Readings:

• Collins, Harry, and Trevor Pinch. 1993. "The Sex Life of the Whiptail Lizard." Chapter 6 in *The Golem: What Everyone Should Know about Science*. Cambridge: Cambridge University Press.

• Textbook, Chapter 2: Research Foundations: Linking Sociological Theory to Research Videos:

- Normal Science: <u>https://www.youtube.com/watch?v=O_oDFvklkyY</u>
- Functionalism: <u>https://www.khanacademy.org/test-prep/mcat/society-and-</u> <u>culture/social-structures/v/functionalism</u>
- Conflict theory: <u>https://www.khanacademy.org/test-prep/mcat/society-and-</u> <u>culture/social-structures/v/conflict-theory</u>
- Symbolic interactionism: <u>https://www.khanacademy.org/test-prep/mcat/society-and-</u> culture/social-structures/v/symbolic-interactionism
- Rational choice (first 3:00 mins): <u>https://www.khanacademy.org/test-prep/mcat/society-and-culture/social-structures/v/rational-choice-exchange</u>

4. Tuesday, Sept 10: Research Design

What are the main purposes of sociological research? How do we know that X causes Y? What kinds of entities should we study? People, informal groups, organizations, social artifacts?

Reading: Review Textbook Chapter 2 Videos:

 Cross-sectional vs. Longitudinal Studies: <u>https://www.youtube.com/watch?v=vnjBXpoFSwY</u>

GSI Office Hours Begin Tuesday, Sept 10

*** Wednesday Sept 11 and Thursday Sept 12: First Section Meetings ***

5. Thursday, Sept 12: Inductive Research: Generating Hypotheses

How do sociologists come up with new ideas? How do they develop novel explanations from observing the social world? Why can we say that Becker's article takes an inductive sociological approach? What role does theory play in his argument? In what ways does he provide an example of pure inductive research, and in what way does he deviate from pure induction? How might you build on Becker's findings to study drug users today?

Readings:

- Ian Dey. 1999. "Introduction." Chapter 1 in *Grounding Grounded Theory: Guidelines* for *Qualitative Inquiry* pp. 1-12. New York: Academic Press.
- Howard S. Becker. 1953. "Becoming a Marihuana User." *American Journal of Sociology* 59 (3): 235-242.

Video: Grounded Theory: <u>https://www.youtube.com/watch?v=QZ4mD5XM7Pc</u>

6. Tuesday, Sept 17: Deductive Research: Testing Hypotheses (I)

How do sociologists test predictions derived from theory? How do they relate empirical observations to theoretical concepts? How do we know that X causes Y?

Reading:

- Arthur L. Stinchcombe. 1968. "Fundamental Forms of Scientific Inference." Chapter 2 in *Constructing Social Theories*. Chicago: University of Chicago Press.
- Crabb, Peter B. and Deb L. Marciano. 2011. "Representations of Material Culture and Gender in Award-Winning Children's Books: A 20-Year Follow-Up." *Journal of Research in Childhood Education* 25(4): 390-398.
- Gretta Kripner, "How to Read a (Quantitative) Journal Article"
 <u>https://www.asanet.org/sites/default/files/savvy/introtosociology/Documents/MethodsD</u>
 <u>ocuments/KrippnerReadingQuantArticle.html</u>

Videos:

- Inductive vs. Deductive: <u>https://www.youtube.com/watch?v=QB41z6_mUxk</u>
- Correlation and Causality: <u>https://www.khanacademy.org/math/probability/scatterplots-a1/creating-interpreting-scatterplots/v/correlation-and-causality</u>

7. Thursday, Sept 19: Deductive Research: Testing Hypotheses (II)

How is Pager's article an example of a deductive sociological approach? Identify the theories she discusses and the related hypotheses. How does she test these hypotheses?

Reading: Devah Pager. 2003. "The Mark of a Criminal Record." *American Journal of Sociology* 108: 937-975.

Videos:

• Mediators, Moderators, Confounders: <u>https://www.youtube.com/watch?v=UHWuu-7Mrc0</u>

8. Tuesday, Sept 24: Measurement: Conceptualization

How do we translate theoretical concepts into observable phenomena we can measure? Readings:

- Textbook Chapter 4. From Concepts to Models: Hypotheses, Operationalization, and Measurement
- Christopher Jencks. 2015. "The War on Poverty: Was It Lost?" *New York Review of Books*. (http://www.nybooks.com/articles/2015/04/02/war-poverty-was-it-lost/)
- David Leonhardt. 2018. We're measuring the economy all wrong. *New York Times*, Sept. 14, 2018. (<u>https://www.nytimes.com/2018/09/14/opinion/columnists/great-</u>

recession-economy-gdp.html)

Videos:

- Levels of Measurement: <u>https://www.youtube.com/watch?v=zJOR3-reCPw</u>
- Conceptualization (minutes 13-21): <u>https://www.youtube.com/watch?v=uaqUzUFHgUg</u>
- Operationalization: <u>https://www.youtube.com/watch?v=6E2_Bqncdo4</u>

*** Tuesday, Sept 24: Research Project #1 (Identifying Variables) Due ***

9. Thursday, Sept 26: Measurement: Validity and Reliability

How do we know that our measures of theoretical concepts are valid and reliable? Why and when do sociologists use composite measures? What is an index? How do you construct one? Reading:

- Textbook, Chapter 5. Evaluating Research: Reliability and Validity
- Susan Mayer and Christopher Jencks. "Poverty and the Distribution of Material Hardship." *Journal of Human Resources* 24(1): 88-114.

Videos:

- Reliability: <u>https://www.youtube.com/watch?v=D62Da6_5Bx4</u>
- Validity: <u>https://www.youtube.com/watch?v=vcfQeQVLAfQ</u>
- Indexes and scales: <u>https://www.youtube.com/watch?v=7DXyo2MLq6g</u>

10. Tuesday, Oct 1: Sampling

What should our unit of analysis be? How should we select units to observe? From what universe or population should we sample? How many observations should we take? How do we draw inferences from our samples to the populations from which they are drawn?

Readings:

- Textbook, Chapter 6, Sampling Strategies
- Nancy Reichman, Julien Teitler, Irwin Garfinkel, and Sara McLanahan. 2001. "Fragile Families: Sample and Design." *Children and Youth Services Review* 23(4-5): 303-326. Videos:
- Population vs. sample: <u>https://www.youtube.com/watch?v=viuSbrKlmZU</u>
- Target population, sampling frame, sample: <u>https://www.youtube.com/watch?v=IOBYsdgGhVw</u>
- Nonprobability sampling: <u>https://www.youtube.com/watch?v=-kwdXEXC7yE</u>
- <u>https://www.youtube.com/watch?v=04-WRLjxiec</u>
- Probability Sampling: <u>https://www.youtube.com/watch?v=qO9SKUwvkgc</u>

11. Thursday, Oct 3: Mid-Term Review

*** Tuesday, Oct 8: In Class Mid-Term Exam ***

Tuesday, Oct 8: No Tuesday Section Wednesday, Oct 9: No Wednesday Section

12. Thursday, Oct 10: Experiments (I)

What are the features of a good (laboratory or field) experiment? What are the strengths and weaknesses of this research design? What can we learn from this research design that we cannot learn from other research designs?

Readings:

• Textbook. Chapter 8. Experimental Research. Videos:

- Observational vs. Experimental Study: https://www.youtube.com/watch?v=71CZQZSrOy0
- Experimental research design: <u>https://www.khanacademy.org/math/ap-</u> statistics/gathering-data-ap/statistics-experiments/v/introduction-to-experiment-design
- External and Internal Validity: <u>https://www.youtube.com/watch?v=V3StgmV1LsM</u>

13. Tuesday, Oct 15: Experiments (II)

What is Pedulla's research question? What is Pedulla's experimental manipulation? Why does Pedulla have to use an experiment to answer his research question?

Reading: David Pedulla. 2016. "Penalized or Protected? Gender and the Consequences of Nonstandard and Mismatched Employment Histories." *American Sociological Review* 81(2): 262-289.

14. Thursday, Oct 17: Surveys (I)

What does it take to design and construct a good survey? What are the strengths and weaknesses of this research design? What can we learn from this research design that we can't learn from other research designs?

Readings:

- Textbook, Chapter 7. Survey Research.
- Howard Schuman. 2002. "Sense and Nonsense about Surveys." *Contexts* 1: 40-47. Videos
- Survey in 10 steps: <u>https://www.youtube.com/watch?v=U1MYM35qUr8</u>
- Methods of collecting survey data (phone, mail, online, face-to-face): <u>https://www.youtube.com/watch?v=9cuOyAR-Y9I</u>
- Examples of bias in surveys (sampling): <u>https://www.khanacademy.org/math/ap-statistics/gathering-data-ap/sampling-observational-studies/v/examples-of-bias-in-surveys</u>
- 7 tips for good survey questions (best practices): https://www.youtube.com/watch?v=Iq_fhTuY1hw

15. Tuesday, Oct 22: Surveys (II)

What theory are Schneider and Harknett trying to test? Identify the IV(s), DV(s), and any moderator or mediator variables. What is their unit of analysis and sampling method? How do they measure their variables?

Reading: Schneider, Daniel, and Kristen Harknett. 2019. Consequences of routine workschedule instability for worker health and well-being. *American Sociological Review*, 84 (1): 82-114.

16. Thursday, Oct 24: Natural Experiments

Why do researchers use "Natural Experiments"? What are some common strategies for doing this kind of analysis? What is Card and Krueger's "natural experiment"? What do they find? Readings:

• Thad Dunning. *Natural Experiments in the Social Sciences: A Design-Based Approach*. Cambridge University Press. Chapters 1 and 2. pp. 1-18.

- David Card and Alan Krueger. "Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania." *The American Economic Review* 84(4): 772-793.
- Discussion of the limitations of natural experiments about minimum-wage laws: (<u>http://www.anderson.ucla.edu/faculty-and-research/anderson-review/minimum-wage-primer-leamer</u>)

Videos:

- Natural experiment: <u>https://www.youtube.com/watch?v=OUN6Gp_H3q4</u>
- Difference-in-differences: <u>https://www.youtube.com/watch?v=J7q2H8aB8bQ</u>

17. Tuesday, Oct 29: Univariate Statistics

What are the basic ways to summarize quantitative data? How sure can we be about the conclusions we draw from gathering and analyzing data? How should we read tables of quantitative data and interpret them? How should we construct data tables?

Reading:

- Textbook, Chapter 14. Univariate and Bivariate Analysis of Quantitative Data Videos:
- Descriptive vs. inferential statistics: <u>https://www.youtube.com/watch?v=g-1NkoiJWpA</u>
- Measures of central tendency: <u>https://www.khanacademy.org/math/statistics-probability/displaying-describing-data/mean-median-basics/v/statistics-intro-mean-median-and-mode</u>
- Measures of variation: <u>https://www.khanacademy.org/math/probability/data-</u> <u>distributions-a1/summarizing-spread-distributions/v/range-variance-and-standard-</u> <u>deviation-as-measures-of-dispersion</u>

*** Thursday, Oct 29: Research Project #2 (Designing a Survey) Due ***

18. Thursday, Oct 31: Bivariate Statistics

How do we quantify the relationship between two or more variables? How do we draw inferences from our samples to the populations from which they are drawn?

Readings:

- Textbook, Chapter 14. Univariate and Bivariate Analysis of Quantitative Data (review "Bivariate Analysis," pp. 478-484)
- Textbook, Chapter 15. Multivariate and Advanced Quantitative Methods (focus on "Significance Testing," pp. 498-507).

Videos:

- Correlation: <u>https://www.youtube.com/watch?v=Ypgo4qUBt5o</u>
- Bivariate Regression: <u>https://www.youtube.com/watch?v=zPG4NjIkCjc</u>

19. Tuesday, Nov 5: Inferential Statistics

Under what conditions are we able to make claims about larger groups of people based on samples? How do we quantify uncertainty in our estimates?

Reading: Textbook, Chapter 15. Multivariate and Advanced Quantitative Methods (focus on "Significance Testing," pp. 498-507)

Video:

- Statistical significance: <u>https://www.youtube.com/watch?v=W_bWzoFkGWc</u>
- Law of large numbers: https://www.khanacademy.org/math/statistics-

probability/random-variables-stats-library/expected-value-lib/v/law-of-large-numbers

- Central limit theorem: <u>https://www.khanacademy.org/math/statistics-</u> probability/sampling-distributions-library/sample-means/v/central-limit-theorem
- Standard error of the mean: <u>https://www.khanacademy.org/math/statistics-probability/sampling-distributions-library/sample-means/v/standard-error-of-the-mean</u>
- Sample size and margin of error: <u>https://www.youtube.com/watch?v=Mfia4nbh-zU</u>
- Sample size, margin of error, and confidence interval: <u>https://www.youtube.com/watch?v=E0hPhKMKLwY</u>

20. Thursday, Nov 7: In-depth Interviews

What are structured interviews, and what is the best way to conduct them? What are the strengths and weaknesses of this research design? What can we learn from this research design that we can't learn from other research designs? What is Reed et al's research question? What do you think the authors learn from using in-depth interviews that they could not learn from a survey? Readings:

- Textbook, Chapter 11. In-Depth Interviewing
- Robert S. Weiss. 2004. "In their Own Words: Making the Most of Qualitative Interviews." *Contexts* 3(4): 44-51.
- Joanna Reed et al. 2015. "Consistent and Inconsistent Contraception Among Young Women: Insights from Qualitative Interviews." *Family Relations* 63: 244-258.
- Video: What is an in-depth interview: https://www.youtube.com/watch?v=Pb3UlqAMwKA

21. Tuesday, Nov 12: Ethnography and Direct Observation

How does in-depth interviewing differ from ethnographic methods? When might one approach be more appropriate than the other?

Reading:

- Textbook, Chapter 10. Ethnography
- Patricia Adler and Peter Adler. 2003. "The Promise and Pitfalls of Going into the Field." *Contexts* 2(2): 41-47.

Videos:

- What is ethnography: <u>https://www.youtube.com/watch?v=6lIzz3DlEWQ</u>
- How to write effective field notes: <u>https://www.youtube.com/watch?v=mp2UQQt4MdI</u>
- Ethnographic ethics, interviews, and field notes: <u>https://www.youtube.com/watch?v=xbpsCDnk1-8</u>

22. Thursday, Nov 15: Ethnography: Sidewalk (FILM)

What is Duneier's research question? In what way is his study inductive? In what way is it deductive? How did he gather data? Why did he choose that method? How did he summarize his data? How generalizable are his findings? What conclusions does he draw?

Readings:

- Mitchell Duneier. 1999. Sidewalk. pp. 3-14, 43-80, 157-187.
- Mitchell Duneier. 1999. Sidewalk. "Methodological Appendix." pp. 333-357.

*** Tuesday, Nov 15: Research Project #3 (Data Analysis) Due ***

23. Tuesday, Nov 19: Analyzing Qualitative Data

Once you've directly observed behavior and/or interviewed people, how do you make sense of what you saw and heard? How do you know what you observe is representative, rather than exceptional? How do you summarize the patterns you observe to report them in research?

Readings:

• Textbook. Chapter 16. Analysis of Qualitative Data.

24. Thursday, Nov 21: Ways to Gather Data: Use Existing Data (I)

What types of existing data are there? Where can we find such data? What are the strengths and weaknesses of this way of gathering data? What can we learn from this type of data that we can't learn from other types?

Reading:

• Textbook. Chapter 12. Material-based methods.

25. Tuesday, Nov 26: Ways to Gather Data: Use Existing Data (II)

What is Haveman and Beresford's research question? Why do they gather data from existing sources, rather than doing an experiment, mounting an original survey, or conducting a direct-observation study? How did they summarize their data? What conclusions did they draw?

Reading:

• Heather A. Haveman and Lauren Beresford. 2012. If you're so smart, why aren't you the boss? Explaining the persistent vertical gender gap in management. *Annals of the American Academy of Political and Social Science*, 639: 114-130.

No Sections Wednesday, Nov 27 or Thursday, Nov 28 (Thanksgiving break) Thursday, Nov 28. No Lecture (Thanksgiving break)

27. Tuesday, Dec 3: Ethics

How can we be sure to conduct research ethically? What special requirements for ethics must we fulfill if our research involves human subjects?

Reading: Textbook. Chapter 3. Ethical Issues in Social Science Research Videos:

- Research ethics: <u>https://www.youtube.com/watch?v=Zbi7nIbAuMQ</u>
- The Milgram Obedience Experiment: <u>https://www.youtube.com/watch?v=fCVII-</u> _4GZQ
- The Stanford Prison Experiment: https://www.youtube.com/watch?v=ndBnlj0bMFA

28. Thursday, Dec 5: Summing up & Review for Final Exam

*** Thursday, Dec 5: Research Project #4 (Interviewing) Due ***

*** FINAL EXAM: Tuesday, December 17, 3:00-6:00pm (location TBD) ***