

Sociology 5 – Evaluation of Evidence – Spring 2018

Professor Heather A. Haveman

Tuesdays and Thursdays, 3:30-5:00pm, F295 Haas (Faculty Wing)

Office hours Wednesdays 3:00-5:00pm, 494 Barrows Hall (signup sheet on office door)

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Course Objectives

People today are barraged by information – a torrent of facts, opinions, and analyses that appear in books, in newspapers and magazines, on radio and television, and in blogs and on-line news sites. The pressure to make sense of that information has never been greater. This course will give you an overview of the research tools most commonly used by social scientists, journalists, and public-policy analysts to gather evidence and analyze it. 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 by evaluating existing research and doing some of your own.

Enrolling in the Class

Each student must be registered for the lecture course and for one of the sections: TR 8-9, TR 9-10, TR 1-2, TR 2-3, TR 5-6, TR 6-7, MW 8-9, MW 9-10, MW 10-11, MW 11-12, MW 12-1, MW 1-2.

The first section meetings will be held on Weds. 30 Jan. (MW sections) and Thurs. 31 Jan. (TuTh sections).

There is a waitlist for the course. All students – those enrolled and those on the waitlist – must attend the first 3 lectures or be dropped from the course. We will take roll! Waitlisted students have a better chance of getting into the course if they pick a section with a shorter waitlist. We will clear the waitlist after lecture 3.

Lectures

Lectures 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.

Sections

Sections provide you with opportunities to ask questions about the readings or lectures, and otherwise engage the material actively, which is hard to carry off in a large lecture. Sections are led by Graduate Student Instructors (GSIs). Section meetings and your GSI's office hours are your main points of contact. Please do not deluge the GSIs with emails. Please do not phone your GSI, unless she or he invites you to do so (GSIs are not required to give out their phone numbers). Each GSI has a mailbox in 410 Barrows.

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Required Readings

Readings offer you the chance to learn how working social scientists and policy analysts actually DO research, how they gather and analyze data. You are expected to do assigned reading before class. You will be tested on the readings in quizzes at some point during lectures, starting class 5. 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 quizzes, midterm, and final exam.

The textbook is required: Deborah Carr, et al. 2017. *The Art and Science of Social Research*. New York: W.W. Norton. It is available at the ASUC bookstore. ISBN 978-0393911589. The print (paperback) version is about \$125, the 3-hole-punch loose-leaf version about \$100, 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 digital.wwnorton.com/socialresearch. I have put copies of the book on 2-hour reserve in Moffitt.

Other readings: Some are journal articles that are available through the UC Berkeley library. The schedule of classes provides links to these readings that work if you are on campus or if you are off campus and have connected via the library's virtual private network. (To download and install the software for this, go to <http://www.lib.berkeley.edu/using-the-libraries/vpn>.) A few readings are not available online from the library. They are available on bcourses. To accommodate students who are on the waitlist, all readings for classes 1-4 are available on bcourses

Assignments and Grades

You will be graded on your understanding of readings, lectures, and discussions in section meetings, and on your ability to complete hands-on research projects, as listed below.

Requirements	Value	Due Date
In-class quizzes	15%	
Participation in section meetings	20%	
Research project 1: Identifying units of analysis	5%	Tues. 5 Feb.
Research project 2: Identifying variables & units of analysis	5%	Thurs. 14 Feb.
Research project 3: Identifying independent & dependent variables	5%	Thurs. 21 Feb.
Midterm exam (in class)	10%	Thurs. 28 Feb.
Research project 4: Designing a survey	15%	Thurs. 21 Mar.
Research project 5: Constructing & analyzing data tables	15%	Tues. 16 Apr.
Final exam (in exam period)	10%	Fri. 17 May 7pm

The median grade in past years has been between B and B+.

In-class quizzes

These will be drawn from the readings, section discussions, and/or lectures. They will be held at a random point during every lecture, beginning with lecture 5. They will usually consist of 3 or 4 multiple-choice questions.

You will take these quizzes using clickers, which resemble remote controls and allow students to take quizzes, respond to polls, and provide feedback in real time. You can purchase clickers at the ASUC bookstore, new or used. After purchasing them, you must register them in order for them to work. To do so, go to <http://www.iclicker.com/registration/> and follow the instructions on that

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web site. Use your 8-digit student ID (5-digit ID for Concurrent Enrollment students). For more information on using clickers at Berkeley, see <https://www.ets.berkeley.edu/services-facilities/clickers/students-getting-started>.

I adopted this technology for several reasons. Research by cognitive psychologists (e.g., Brown, Roediger, and McDaniel [Make It Stick](#) 2014) indicates that students should be graded frequently throughout the semester rather than at only a few points in time. Clickers make this possible in large classes. Clickers 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. Finally, using clickers makes it easier for your reactions and opinions to serve as launching point for in-class discussion and debate.

Bring your clicker to class every day. The care and keeping of your clicker is your responsibility. If you forget it, if it runs out of batteries, if it fails to communicate with the receiver, or if it experiences any other kind of technical difficulty, you will get zero on that day's quiz. I will not change any quiz grade based on a report of a technical malfunction. I understand, however, that freak accidents happen and that even the most conscientious person can forget something once in a while. To allow for that possibility, I will drop your 2 lowest quiz scores.

Midterm and final exam

These will test you on your comprehension of course material. Both are closed-book tests. Each constitutes 10% of your grade. The midterm is **Thurs. 28 Feb., in class**. The final exam is **Fri. 17 May, 7-8:30pm**. The exam period is 7-10pm, but the final for this course will take only 1 hour 20 minutes to complete, because it has the same weight as the midterm.

Research projects

These are designed to give you hands-on experience with research. The list of research projects is at the end of the syllabus, after the schedule of classes and readings. These projects are **due in your GSI's mailbox in Barrows Hall by 3pm** on their respective due dates. Late projects will be marked down 1 full grade (e.g., B→C) for each day late.

You will complete 3 individual research projects (projects 1-3) and 2 group research projects (projects 4-5). A lot of sociological research is coauthored; doing this work in groups gives you a sense of what it is like to work on a research team. It also allows you to learn from each other.

Participation in section

Your GSI will assign 20% of your grade based on your participation in section. Participation involves attending sections, contributing to discussions, asking relevant questions, and answering questions asked by GSIs. Motormouths beware: the quality of your contribution is far more important than the quantity.

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Course Policies

Lectures

I do not allow laptops in class unless you have a legitimate, DSP-documented reason and have received explicit permission from me. (I know I couldn't resist surfing the web or emailing my friends during class, so I'm removing the temptation!) You must also switch off your cell phones (not just set to vibrate), unless you have a legitimate need (e.g., your spouse is about to have a baby or a liver transplant) that you have told me about.

I will post slides from the lecture the day before lecture. You can print these out to avoid having to draw every figure on the slides or write down every set of bullet points. You can also take notes to cement your understanding of the lecture material. Recent research shows that taking notes on laptops is detrimental to learning because it results in shallower information processing (Mueller and Oppenheimer *Psychological Science* 2014 ([link](#)); Singer and Alexander, *The Journal of Experimental Education* 2017 ([link](#))).

Office hours

I encourage you to sign up for office hours. Usually it's best to sign up in advance (there is a sign-up sheet on my door), but if there is an empty slot, I'm happy to meet with students who drop by. The GSIs will also hold office hours; they will tell you about these when you meet in section.

Academic honesty

According to a recent national survey (the National Study of Youth and Religion Wave 2), 50% of college students reported cheating at least once in the previous year and 18% reported more frequent cheating. It is nearly certain that some members of our class will try to cheat at some point during the semester. In fairness to students who are honest, those who are detected cheating will be dealt with as severely as University policy allows. Cheating includes, but is not limited to, using notes or written or electronic materials during an exam or quiz; copying another person's exam, quiz, or research project; allowing someone to copy your exam, quiz, or research project; having someone take an exam or quiz for you; or plagiarizing any written assignment. Any suspected cheating will be immediately reported to Student Judicial Affairs.

The use of clickers in lectures will allow us to have more enjoyable, more interactive discussions and to conduct daily quizzes quickly. It also, however, creates opportunities for academic dishonesty. Using someone else's clicker for them is the same as cheating on an exam. To ensure honesty and to avoid any appearance of dishonesty, no person may ever have more than one clicker in his or her possession. If I or one of the GSIs sees any student holding, touching, or otherwise interacting with more than one clicker at any time during class, those clickers will immediately be confiscated and the incident will be reported to Student Judicial Affairs.

Appealing grades

To appeal a grade on research project or the midterm please follow this procedure:

- 1) Within **7 days** after the project or midterm is handed back to you, write a note (1-2 paragraphs) explaining why you think your grade should be changed and deliver it to your GSI via email.
- 2) Make an appointment to meet with your GSI during office hours (for group assignments, not all group members have to be present), during which time your GSI will explain his/her/their

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decision about your appeal. If you can't meet your GSI during office hours, your GSI will respond to you via email.

- 3) If you are not satisfied with your GSI's decision and reasoning, within **7 days** of receiving your GSI's decision, make an appointment to meet Professor Haveman, who will be the final arbitrator.

Soc 5 – Evaluation of Evidence – Schedule of Classes and Readings

1. Tues. 22 Jan. Introduction

What are the goals of this course? What do I have to do to get a good grade? What should I do if I'm on the wait list? What should I do if I need/want to change sections?

2. Thurs. 24 Jan. Sociology and Social Science

What is (social) science? What does science do? What kinds of things do social scientists (especially sociologists) study? How do sociologists study those things?

Reading: Textbook. Chapter 1. The art and science of social research: An introduction.

3. Tues. 29 Jan. The Structure of Science (I): Paradigms

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

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, pp. 32-40, 45-52.

Note: Sections begin Wed. 30 Jan. (for MW sections) or Thurs. 31 Jan. (for TuTh sections).

Note: GSI office hours begin on or after Wed. 30 Jan.

4. Thurs. 31 Jan. The Structure of Science (II): Theories and Hypotheses

What are the elements of scientific theories? How do sociologists use theories?

Readings: Textbook. Chapter 2. Research foundations: Linking sociological theory to research, pp. 53-56.

5. Tues. 5 Feb. Testing Hypotheses: Deductive Research

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

Reading: Arthur L. Stinchcombe. 1968. Fundamental forms of scientific inference. Chapter 2 in *Constructing Social Theories*, pp. 15-28. Chicago: University of Chicago Press.

6. Thurs. 7 Feb. Inductive vs. Deductive Research: Generating vs. Testing Hypotheses

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

Readings: Textbook. Chapter 2. Research foundations: Linking sociological theory to research, p. 41-43.

Howard S. Becker. 1953. Becoming a marihuana user. *American Journal of Sociology*, 59 (3): 235-242. (<http://www.jstor.org/stable/2771989>)

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Devah Pager. 2003. The mark of a criminal record. *American Journal of Sociology*, 108 (5): 937-975. (<http://www.jstor.org/stable/10.1086/374403>)

7. Tues. 12 Feb. 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.

Online: Before class, visit these web sites to familiarize yourself with these 2 (in)famous experiments:

- 1) The Milgram Obedience Experiment:

<https://www.youtube.com/watch?v=fCVII- 4GZQ>

- 2) The Stanford Prison Experiment: <https://www.youtube.com/watch?v=eL9vLJoK4T8>

8. Thurs. 14 Feb. Measurement (I): Conceptualization and Operationalization

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*, April 2, 2015. (<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. (<https://www.nytimes.com/2018/09/14/opinion/columnists/great-recession-economy-gdp.html>)

Watch: <https://www.youtube.com/watch?v=q9EehZlw-zk> (we will watch this in class)

***** Note: Mon. 18 Feb. is President's Day. No sections 18 or 19 Feb. *****

9. Tues. 19 Feb. Measurement (II): Validity and Reliability

How do we know that our measures of theoretical concepts are valid and reliable?

Readings: Textbook. Chapter 5. Evaluating research: Reliability and validity.

Susan Mayer and Christopher Jencks. 1989. Poverty and the distribution of material hardship. *Journal of Human Resources*, 24 (1): 88-114.
(<http://www.jstor.org/stable/145934>)

10. Thurs. 21 Feb. Sampling and Estimating Population Characteristics

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? How do we quantify the uncertainty inherent in our estimates of population characteristics, based on samples?

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.
(<https://www.sciencedirect.com/science/journal/01907409/23/4-5>)

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11. Tues. 26 Feb. **Midterm Review**

12. Thurs. 28 Feb. **IN-CLASS MIDTERM**

Note: No section meetings Mon. 4 Mar. or Tues. 5 Mar., so GSIs have time to grade the midterm.

13. Tues. 5 Mar. **Ways to Gather Data: 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 can't learn from other research designs?

Reading: Textbook. Chapter 8. Experimental research.

14. Thurs. 7 Mar. **Ways to Gather Data: Experiments (II)**

What hypotheses did the authors set out to test? In what ways did they make sure that their methods and results were scientifically sound? Suppose that all their subjects (women and men) had more macho attitudes after the test than they had before the test, regardless of the result they were given. What conclusions would you draw? Think of another widely held belief in our culture. How might you test that belief through a laboratory experiment?

Reading: Robb Willer, Christabel Rogalin, Bridget Conlon, and Michael T. Wojnowicz. 2013. Overdoing gender: A test of the masculine overcompensation thesis. *American Journal of Sociology*, 118 (4): 980-1022. (<http://www.jstor.org/stable/10.1086/668417>)

15. Tues. 12 Mar. **Ways to Gather Data: 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 (2): 40-47. (<http://www.jstor.org/stable/41800720>)

16. Thurs. 14 Mar. **Ways to Gather Data: 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: Daniel Schneider and Kirsten Harknett. 2019. Schedule instability and unpredictability: Worker and family health and wellbeing. *American Sociological Review*, forthcoming.

17. Tues. 19 Mar. **Ways to Gather Data: Natural Experiments**

Why do researchers use natural experiments? What are some common strategies for doing this kind of study? 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 Card and Krueger's natural experiment? What do they find?

Readings: Thad Dunning. 2012. *Natural Experiments in the Social Sciences: A Design-Based Approach*, Chapter 1 (Introduction), pp. 1-18. New York: Cambridge University Press.

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David Card and Alan Krueger. 1994. Minimum wages and employment: A case study of the fast-food industry in New Jersey and New York. *American Economic Review*, 84 (4): 772-793. (<http://www.jstor.org/stable/2118030>)

Bonus: Discussion of the limitations of natural experiments about minimum-wage laws: (<http://www.anderson.ucla.edu/faculty-and-research/anderson-review/minimum-wage-primer-leamer>)

18. Thurs. 21 Mar. Analyzing Quantitative Data (I): Distributions and Relationships between Variables

What are the basic ways to summarize quantitative data? How do we quantify relationships between two or more variables? How do we describe those relationships?

Readings: Textbook. Chapter 14. Univariate and bivariate analysis of quantitative data.

Video: Skewed distributions explained: <https://www.youtube.com/watch?v=XSSRrVMOqlQ>

*** Spring Break 26-30 Mar. ***

19. Tues. 2 Apr. Analyzing Quantitative Data (II): Hypothesis Testing

How do we test hypotheses about relationships between two or more variables, using samples to estimate population characteristics? How do we quantify the uncertainty inherent in our estimates of population characteristics, based on samples?

Reading: Textbook. Chapter 15. Multivariate and advanced quantitative methods.

20. Thurs. 4 Apr. Ways to Gather Data: Interviews

What are in-depth 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?

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. (<http://www.jstor.org/stable/41800855>)

21. Tues. 9 Apr. Ways to Gather Data: Direct Observation (I)

What is ethnography? What is the difference between participant observation and direct observation? 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?

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. (<http://www.jstor.org/stable/41800774>)

22. Thurs. 11 Apr. Ways to Gather Data: Direct Observation (II) (mixed with interviews)

What is Desmond's research goal? 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?

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Reading: Matt Desmond. 2016. *Evicted: Poverty and Profit in the American City*, pp. 1-52, 315-336, and the notes to those pages. New York: Crown Publishers. Focus on pp. 1-52, 315-328, 333-336, including the notes to those pages.

Bonus: The eviction lab: <https://evictionlab.org/>

23. Tues. 16 Apr. 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: Ian Dey. 1999. Introduction. Chapter 1 in *Grounding Grounded Theory: Guidelines for Qualitative Inquiry*, pp. 1-12. New York: Academic Press.
Textbook. Chapter 16. Analysis of Qualitative Data.

24. Thurs. 18 Apr. 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. Tues. 23 Apr. 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, a survey, or 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.
(<https://www.jstor.org/stable/41328593>)

26. Thurs. 24 Apr. Comparing the Different Ways to Gather Data

What are the pros and cons of each way of gathering data? What kinds of research questions are best answered using which data-gathering method?

Reading: Matt Desmond. 2016. *Evicted: Poverty and Profit in the American City*. New York: Crown Publishers. Focus on pp. 328-333, including the notes to those pages.

27. Tues. 30 Apr. No Class (unless we need one if we fall behind/an earlier class is cancelled)

28. Thurs. 2 May Final Exam Review

Fri. 17 May **Final exam: 7:00-8:30 (1 hour 20 minutes, just like the midterm, with 10 minutes' "Berkeley time" at the start)**

Soc 5 – Evaluation of Evidence – Research Projects (Individual and Group)

Research project 1 (individual): Identifying units of analysis (DUE Tues. 5 Feb.)

Your GSI will hand out this assignment, which will consist of a series of statements. Your task is to determine the unit of analysis for each statement.

You are to work on this assignment on your own. You are expected to uphold the honor code and NOT collaborate with anyone else.

Research project 2 (individual): Identifying variables and units of analysis (DUE Thurs. 14 Feb.)

Download this article: Ann L. Mullen and Jayne Baker. 2018. Gender gaps in undergraduate fields of study: Do college characteristics matter? *Socius*, 4: 1-14. ([link](#))

Most studies have only 1 unit of analysis; a few have 2 or more. What is the (or a) unit of analysis for this study? Provide a brief quotation from the article to justify your answer. Explain how this passage justifies your answer.

Most studies examine multiple variables that describe their unit of analysis. Identify 2 variables for the unit of analysis you identified and give a complete list of the attributes of both variables, as they were described in the article. Provide brief quotations from the article to justify your answers. Explain how these passages justify your answer.

1-2 pages maximum. You are expected to do this assignment on your own. You are expected to uphold the honor code and NOT collaborate with anyone else.

HINT 1: For help on how to navigate this reading, look at [How to read a journal article](#). You might also watch this video on how to read an academic article ([link](#)). Both are also useful for research project 3.

HINT 2: You can ace this assignment by reading the abstract, the introduction, and the data-and-methods section of the paper. (The same advice holds for the next assignment.)

Research project 3 (individual): Identifying independent and dependent variables (DUE Thurs. 21 Feb.)

Download this article: Rourke L. O'Brien and Barbara Kiviat. 2018. Disparate impact? Race, sex, and credit reports in hiring. *Socius*, 4: 1-20. ([link](#))

Identify 1 dependent variable and 1 independent variable. Make sure that these 2 variables are predicted to be causally related to each other. Provide brief quotations from the article to justify your answers. Explain, in your own words, how and **why** the independent variable is related to the dependent variable.

1-2 pages maximum. You are expected to do this assignment on your own. You are expected to uphold the honor code and NOT collaborate with anyone else.

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Research project 4 (group): Designing a survey (DUE Thurs. 21 Mar.)

You will design a questionnaire that might be used in a survey to assess people's attitudes toward **immigration into the United States**. Your questionnaire should obtain the following from each respondent:

- ◆ their age, race/ethnicity, education, and political views;
- ◆ a 2-part contingency question about their country of birth and immigration status; and
- ◆ their beliefs about the pros and cons of immigration, in the form of a matrix question, using Likert-type responses to five statements.

This project should be 4-6 long – 6 pages maximum.

The first and second pages should be the questionnaire laid out in the format you would use if you were actually conducting the survey. Make sure that the format will be easy to read and will not be difficult for respondents to answer. Be sure to provide appropriate spaces for respondents to check or write-in their answers.

Question wording should be simple and straightforward: avoid double-barreled questions, loaded terms, and negations. Justify your choice of open or closed-ended question. For closed-ended questions, response categories should be exhaustive and mutually exclusive. Matrix questions using Likert-type responses should have a consistent scale, but 1 or 2 questions should be reverse-coded.

In the following 3-4 pages, discuss these issues:

- ◆ *Question wording*: For each question, why are you asking this question? Why did you word it this way? Why did you ask an open- or closed-ended question?
- ◆ *Question level of measurement*: For each question, identify the level of measurement and explain why it is appropriate. (All questions in the 5-part matrix question should be at the same level.)
- ◆ *Question order*: Why did you put the questions in this order?

Soc 5 – Evaluation of Evidence – Research Projects (Individual and Group)

Research project 5 (group): Constructing and analyzing data tables (DUE Tues. 16 Apr.)

Over the past decade, support for gay marriage rights has increased tremendously. But this is still a contentious issue. Your task will be to analyze cross-generational differences in support for gay marriage.

To answer these questions, you will download 2 files from bcourses concerning the 2016 General Social Survey. These were downloaded from <http://sda.berkeley.edu/archive.htm>. The worksheet labelled “GSS 2016 extract” contains the data you are to analyze – the subset of observations on 1,200 people, taken from the 2016 survey. The codebook lists the variables in the dataset and explains what each means and how each is coded; i.e., how each numeric value corresponds to a substantive response.

Note: In the GSS, several different codes are used to denote missing values. The specific form depends on the variable. Before you start tabulating the data, check the codebook for each variable to make sure your tables don’t include observations with missing values. (Create a new spreadsheet and copy the data to that spreadsheet.)

- ◆ Create 2 tables to display the distributions of 2 variables: age and support for gay marriage.
 - ◆ For age, there are a lot of categories (every year from 18 up), so your table should aggregate data into a smaller number of categories (5-6).
 - ◆ For both variables, show the actual distribution of observations, not just measures of central tendency and dispersion. (That means your tables should contain as many columns as remain in the data once you’ve eliminated missing values for each variable.)
 - ◆ For both tables, provide informative titles and calculate totals.
- ◆ Create 1 other tables (a cross tab) to show the bivariate association between age and support for gay marriage.
 - ◆ Provide an informative title and informative label for the rows and columns.
 - ◆ Provide row and column totals, as well as an overall total.
- ◆ In your report, describe the level of measurement for both variables.
- ◆ In your report, describe the central tendency of both variables. Be sure to use measures that are appropriate for each variable, given its level of measurement.
- ◆ In your report, calculate and describe the association you observe between the variables (its direction and strength).
- ◆ You can include bar charts in your report to “visualize” the data. But bar charts do not take the place of tables.

This project should be 4-6 pages long – 6 pages maximum.

For help learning how to use excel 2013, go to <https://www.youtube.com/watch?v=J4zq3R8b5dQ>. It will lead you through 4 video lessons.

For help learning how to use excel 2016, go to <https://edu.gcfglobal.org/en/excel2016/>. This link leads you to a series of lessons. You can scroll down and select specific topics.

For help on creating cross-tabs in excel, go to <https://www.youtube.com/watch?v=a1n01NLXi3Y> (excel 2013) or <https://www.youtube.com/watch?v=OXuQnro0UnE> (excel 2016). For help with other spreadsheet programs, google “create crosstab [name of program]”.