SOSC 13100/1: Social Science Inquiry I (Autumn 2021)

Meeting Time: Tue & Thu 9:30 AM-10:50 AM Location: Social Sciences Research Building 106

Instructor: Dr. Shu Fu Email: <u>fushu@uchicago.edu</u> Office: Pick Hall 503

Office hours: Thu 2:00 PM-5:00 PM or by appointment

COURSE DESCRIPTION

The Social Science Inquiry sequence explores classic and contemporary points of view about ways of gathering, analyzing, and interpreting information about economic, political, and social issues. The course aims to provide the student with an introduction to the philosophy of social science inquiry, a sense of how that inquiry is conducted, and an understanding of how policy implications can be drawn responsibly from evidence provided by empirical social science. The sequence's objective is to convey both the promise and the pitfalls of social science and a sense of its uses and abuses.

The Autumn Quarter in this sequence focuses on the basics of social science, and the basics of quantitative research design in the social sciences. The Winter Quarter will introduce you to various statistical topics that are foundational to engaging with quantitative social science in an informed way. You'll also learn some basics of statistical computing. Finally, the Spring Quarter is more of a workshop, where you will be guided through completing your own research project.

COURSE MATERIALS

All Readings for this class are available on Canvas. It's important that you do them. I do my best to limit the amount of reading I assign without threatening your education. That's my end of the bargain. Your end of the bargain is keeping up with the readings I do assign. Sometimes the readings will cover the same material covered in class to reinforce it, other times they will cover different material to help you think about that day's topic in a broader way.

You may find difficult to fully comprehend all technical or methodological details in some of the readings, don't worry! My lectures will help you get the gist of these readings and class assignments are also designed for you to reflect what you have learned from these readings.

COURSE ORGANIZATION

The course includes three parts: I. Designing Social Science Research, II. Experiments in Social Science, and III. Observational Studies. The class meets twice per week for 1 hour and 20 mins each.

Each meeting will be a combination of lecture and discussion. I will first give you a mini lecture that introduces the main concept; then, I will guide the class through a discussion on the topic where we engage with the readings together.

EARNING YOUR GRADE

Participation: 30%

- (Attendance) To participate, you must attend class. Therefore, attendance factors into your grade.
- (In-class participation) Your participation grade will also depend on your in-class participation. This *is not* just a record of how often you talk. I holistically consider other information as well, such as: demonstration that you have done the readings; synthesizing course material from different days; demonstration that you are thinking critically about the material; and the frequency of opportunities for substantial participation in different class sessions.
- (Optional short assignments) I will occasionally assign *optional* participation assignments. Generally, these will be discussion board posts on Canvas, but they could be other things. These will provide *some* opportunity to earn participation points in a different setting. However, note that they will not be enough to make up for never participating in person.

Four writing assignments: 70%

- Papers 1-3 are worth 15 points, and Paper 4 is worth 25 points. Due dates are also in the course schedule below: Sunday October 10th (Week 2); Saturday October 30th (Week 5); Sunday November 14th (Week 7); and Thursday December 9th (Final Week).
- Rubrics on Canvas will explain the assignment options in more detail. All the papers will ask you to write on topics that require you to, in different ways, demonstrate your facility with the course material. The syllabus for the first paper will be on Canvas at the beginning of the class.

MISSED/LATE ASSIGNMENTS

I accept missed assignments without penalty for documented medical reasons, family crises, calls to active military duty or jury duty, religious holy days, and official University activities. I also give deference to parents with dependent children who are sick. Otherwise, late assignments drop 10% of their full worth for each day they are late, but you can still submit them to me through email.

COURSE OUTLINE

I. Designing Social Science Research

Week 1

Sep 28 Introduction; how do we study random social events as scientists?

• Mlodinow, Leonard. *The Drunkard's Walk (2009),* Ch 1. New York: Vintage Books.

Sep 30 Thinking about social concepts and asking good empirical questions

• Friedman, Milton. (1953). "The Methodology of Positive Economics," Essays in Positive Economics, Chicago: University of Chicago Press.

Week 2

Oct 5 Measurement and description

- Kellstedt. Paul and Guy Whitten. (2009). Fundamentals of Social Science Research, 3d edition. selection, Ch5. New York: Cambridge Press.
- Gladwell, Malcolm. (2011). "The Order of Things," *The New Yorker*, Feb 14, 2011, 1-13. (https://www.newyorker.com/magazine/2011/02/14/the-order-of-things)

Oct 7 Why is randomness so special? Law of Errors

• Mlodinow, Leonard. (2009). The Drunkard's Walk (2009), Ch 7. New York: Vintage Books.

Paper 1 due on Canvas: Sunday Oct 10th at 11:59PM

II. Experiments for Social Science

Week 3

Oct 12 Internal and external validity

- McDermott, Rose. (2002), "Experimental Methods in Political Science," *Annual Review of Political Science*, 5:31-61.
- Sears, David O. (1986). "College Sophomores in the Laboratory: Influences of a Narrow Data Base on Social Psychology's View of Human Nature," *Journal of Personality and Social Psychology*, 31(3): 515-530.

Oct 14 Relationships and causes

• Banzhaf, H. Spencer, Lala Ma, and Christopher Timmins. (2019), "Environmental Justice: Establishing Causal Relationships," *Annual Review of Resource Economics*, 11:377-98.

Week 4

Oct 19 Lab experiments: politics and psychology

- Iyengar, Shanto, Mark E. Peters, and Donald Kinder. (1982). "Experimental Demonstrations of the 'Not-So-Minimal' Consequences of Television News Programs," American Political Science Review, 76(4): 848-58.
- Darley, John M. and Bibb Latané (1968). "Bystander Intervention in Emergencies," *Journal of Personality and Social Psychology*, 8(4): 377-83.

Oct 21 Lab experiments: economics

• Miller, Gary J. and Andrew B. Whitford (2002). "Trust and Incentives in Principal-Agent Negotiations," *Journal of Theoretical Politics*, 14(2): 211-67.

Week 5

Oct 26 Survey experiments

- Sanders, Michael, Emma Stockdale, Susannah Hume, and Peter John. (2021). "Loss aversion fails to replicate in the coronavirus pandemic: Evidence from an online experiment," *Economics Letters*, 199:109433.
- Pepinsky, Thomas B., R. William Liddle, and Saiful Mujani. (2012). "Testing Islam's Political Advantage: Evidence from Indonesia," *American Journal of Political Science*, 56(3): 584-600.

Oct 28 Field experiments

- Pager, Devah. (2003). "The Mark of a Criminal Record," *American Journal of Sociology*, 108(5): 937-75.
- Bertrand, Marianne and Sendhil Mullainathan. (2004). "Are Emily and Greg More Employable Than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination," *American Economic Review*, 94(4):991-1013.
- Butler, Daniel M. and David E. Broockman. (2011). "Do Politicians Racially Discriminate Against Constituents? A Field Experiment on State Legislators," *American Journal of Political Science*, 55(3): 463-77.

Paper 2 due on Canvas: Saturday Oct 30th at 11:59PM

III. Observational studies

Week 6

Nov 2 Correlational studies – cross sections

- Kahan, Dan M. Ellen Peters, Maggie Wittlin, Paul Slovic, Lisa Larrimore Ouillette, Donald Braman, and Gregory Mandel. (2012). "The polarizing impact of science literacy and numeracy on perceived climate change risks," *Nature Climate Change*, 2:732-35.
- Ba, Bocar, Dean Knox, Jonathan Mummolo, and Roman Rivera. (2021). "The role of officer race and gender in police-civilian interactions in Chicago," *Science*, 371:696-702.

Nov 4 Time-series – cross time

- Campbell, Donald T. and H. Laurence Ross. (1968). "The Connecticut Crackdown on Speeding: Time-Series Data in Quasi-Experimental Analysis," *Law & Society Review*, Aug 1968 (3): 33-54.
- Easterlin, Richard A. (1995). "Will raising the incomes of all increase the happiness of all?" *Journal of Economic Behavior and Organization*, 27(1995): 35-47.

Week 7

Nov 9 Establishing Control

• Levitt, Steven D. (2004), "Understanding Why Crime Fell in the 1990s: Four Factors that Explain the Decline and Six That Do Not," *Journal of Economic Perspectives*, 18(1): 163-90.

Nov 11 Creating "as if" random conditions

Glassberg Sands, Emily. (2016). "5 Tricks when AB Testing is Off the Table,"
Teconomics—Medium. (https://medium.com/teconomics-blog/5-tricks-when-ab-testing-is-off-the-table-f2637e9f15a5/)

Paper 3 due on Canvas: Sunday Nov 14th at 11:59PM

Week 8

Nov 16 "Difference-in-Differences"

• Card, David and Alan B. Kreuger. (2004). "Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania," American Economic Review, 84(4): 772-93.

Nov 18 Regression Discontinuity

- Hall, Andrew. (2015). "What Happens When Extremists Win Primaries," *American Political Science Review*, 109(1): 18-42.
- Nekoei, Arash and Andrea Weber. (2017). "Does Extending Unemployment Benefits Improve Job-Quality? *American Economic Review*, 107(2): 527-61.

Week 9

Nov 23 No Class (Thanksgiving)

Nov 25 No Class (Thanksgiving)

Week 10

Nov 30 "Big data", machine learning and text-as-data methods

- Grimmer, Justin. (2015). "We're All Social Scientists Now: How Big Data, Machine Learning, and Causal Inference Work Together." *PS: Political Science & Politics* 48(1): 80-83.
- Fu, Shu, and Meg Savel. (2020). "Policy without Partisanship: The Direct Appeals of First Ladies." Presidential Studies Quarterly. 50(4): 773-761.

Dec 2 Ethics in research and replication

- Hubert, Laurence and Charles Wainer (2013), A Statistical Guide for the Ethically Perplexed, "Ethics of data collection," Ch 16, 421-448. Boca Raton: CRC Presss. (Available as an ebook through library website)
- Pridemore, William, Alex, Matthew C. Makel, and Jonathan A. Plucker. (2017). "Replication in Criminology and the Social Science," *Annual Review of Criminology*, 1:19-38.
- Freese, Jeremy and David Peterson (2017). "Replication in Social Science," *Annual Review of Sociology*, 47: 147-65. (Fig 2 is a useful visual aid)

Paper 4 due on Canvas: Dec 9th at 11:59PM (Thursday of finals week)