

Data Collection and Analysis
Sociology 213 (Spring 2019) - 4 credits

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Lecture: M/W 10:10-11a, Integrated Learning Center (ILC) S120

Instructor:

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TA:

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Section A: Fr 11:15AM - 12:05PM; Section B: Fr 12:20PM - 1:10PM (Machmer W-27)

What this class is about: Our field is the study of society and associated patterns of social phenomena. It will be argued that Sociology is also, deceptively, *among the most difficult of sciences*. One reason for this is that unlike some physical sciences where humans have, over hundreds of years, formulated reasonable approximations of fundamental laws related to regularities in nature (think: gravity! the Pythagorean Theorem! $E = mc^2$), Sociology is comparatively young, and human beings are elements in what we term complex systems. These systems – and the elements that constitute them – often behave in regular ways, but also unpredictably and have consequences that only emerge when a certain set of conditions is just so. This makes the search for ‘fundamental laws’ in social science notoriously difficult. Indeed, perhaps a fool’s errand.

But we’re not fools! Humanity has made it this far, and although life in the US in 2018 is comparatively better and easier for most of us than for folks during the prior several centuries (in terms of average life expectancy, average freedoms, etc.), it’s still hard to connect why A *causes* B. There are usually dozens, if not thousands of reasons why $A \rightarrow B$. A fundamental assumption in this course is that we can learn something valuable by understanding human actions, intentions, attitudes, values, variation in attributes, and spatial patterning of human movement. To learn this, one set of tools that we use are theories of causality to understand *mechanisms of action*. (1) How is that we decide that A *causes* B? (2) What evidence can help us to evaluate this? (3) What are the most appropriate research methods to use, and what are the best kinds of data to collect?

These questions are part of what this course is about. By the end of the term, my hope for you is that you’ll have a good answer to the following questions: (3) What are some useful ways (as well as unhelpful ways) to study the social world?, and (4) What are the limits to what we can know about social phenomena?

Your main job as a member of this class is to be relentlessly curious about these types of questions. An equally important goal is to continue to develop skills *that will transfer beyond this course*: a) evaluating the quality of evidence on scientific claims, b) collecting, analyzing, and interpreting data, and c) writing and reflecting about approaches to research.

The format of the course is a mix of lecture, team-based learning, discussion, and practical application through lab exercises. You will design your own research project in which you use (provided) existing survey data, or survey/interview a sample of people of your own so that you can provide new evidence related to a research question, use that evidence to test a set of hypotheses that you generate, and then communicate your results.

Grading: Please remember that I'm evaluating your performance in class, not your worth as a human being. It's easy to forget this sometimes. All weekly reading memos, in-class quizzes, exams, and research projects will be evaluated on a 5-point scale (0=F, 1=D, 2=C, 3=B, 4=A). Any appeals to your grade (I am a fallible human subject to making mistakes) must be done in-person during office hours in conversation (not over email); bring justification for the correction being requested. If you request a re-grade I may revise your grade upward or downward.

The following weights will apply to graded material: 25% class & section participation and attendance; 20% in-class exams; 15% reading memos; 10% research presentations; 30% research project. Your final grades will be calculated according to the following scale:
A = 4.0 – 3.8 ; A- = 3.7 – 3.4 ; B+ = 3.3 – 3.1 ; B = 3.0 – 2.8 ; B- = 2.7 – 2.4 ; C+ = 2.3 – 2.1 ; C = 2.0 – 1.8 ; C- = 1.7 – 1.4 ; D+ = 1.3 – 1.1 ; D = 1 ; F < 1

Prerequisites. You are expected to come to class and section having read the material so we can talk about it. Some of this material will (intentionally) challenge you; however, know that the amount of reading and writing for this course are appropriate to a 4-credit course. You might be especially challenged if you haven't yet taken an 100-level Sociology course.

Technology: I have a no-screens policy in the classroom (besides the lab computers, which we'll do group exercises on). This means computers, phones, tablets, and other kinds of screens. I've designed our sessions together as interactive, discussion-based lectures. Taking notes, asking questions, and reviewing notes in preparation for exams are the best predictors of *deep learning* in college coursework. I'm happy to point you towards numerous pieces of research that show this to be the case. If you have an exception granted by the Office of Disability service to allow a computer, please be sure to have that office get in touch with me.

Brief check-in. Every student in the class is required to sign up for a 10-minute office hour meeting with me during the first 2 weeks. This is a moderately large class – but we'll all get to know each other. You'll learn that I take my job seriously. It helps me if I know more about your interests in the course material, and if there are ways that I can help you learn. (Pro tip: *it helps you too*. It's easier for professors who know their students to write letters of recommendation for them for a job or scholarship opportunity. Think ahead.)

Readings. There is only 1 required book. The remaining materials are research articles that will be posted to Moodle. You can purchase any version (print or e-book) you'd like, and print out the articles/chapters or not as you wish. Do keep in mind if you purchase the e-book or download course readings for your screen at home, that no screens are allowed in class. I encourage everyone to keep a notebook with their reading notes and reflections handy in lectures. Staying on top of the readings and engaging in class will help you get the most out of class.

• ORDER THE TEXTBOOK EARLY FROM YOUR PREFERRED BOOKSELLER SO THAT YOU DON'T FALL BEHIND. Required text(s):

- *The Art & Science of Social Research* (W.W. Norton 2017)
- Research articles/chapters posted to Moodle (either 1 long, or 2 short per week)

Names and Pronouns. Everyone has the right to be addressed by the name and pronouns that they use for themselves. Students can indicate their preferred/chosen first name and pronouns on SPIRE.

CLASS EXPECTATIONS

What I expect of you:

Active attendance (25%). Showing up to lectures (50% of this grade) and discussion section (the other 50%) are both mandatory. I'll be giving a 5-question quiz on either Monday/Wed each week as a means of regular evaluation so that you know whether you're getting the material. However, life happens. Each student is allowed one absence from a lecture (lowest quiz will be dropped), and one absence from a discussion, no reason necessary. Outside of these absences, get in touch if you have extenuating circumstances, and we'll find a solution.

Research project & presentation (40%). This will unfold in four parts over the term. Part 1: Identifying a research question (due Fr. 2/15, 2p). Part 2: Choosing a research design (due Fr. 3/8, 2p). Part 3: Sampling frame & evidence (due Fr. 4/5). Part 4: Analysis of preliminary results (due Wed 4/17-26). Final written version (6-8 pages double-spaced) due Mon 5/6. The presentation of your results will happen in class/section during week 13 and week 14.

Short reading memos (15%). Each week, you have a set of readings that touches on a particular theme. For either Monday or Wednesday (but not both!) your task is to write a short (250-300-word) response statement that summarizes an important idea/ideas in a chapter/article(s) and offers some of your original thoughts and reactions to it/them. What struck you as surprising? What challenged your previous thinking on the topic? Do you disagree with the author(s)? Does this connect to ideas you learned elsewhere? You have a lot of flexibility here, by design. *Memos must be (a) uploaded to Moodle prior to the class session about which you're writing, and (b) printed and given to instructor to class, to receive credit.*

Exams (20%). a) First short exam (15%). This 50m in-class exam on Wed, 3/6 will be multiple-choice and short-answer Qs intended to test your grasp of key ideas from the 1st part of the term. b) The second in-class exam (15%) is Wed 5/1 & will cover post-spring break.

What you can expect from me:

To help co-create a constructive learning environment. This means being knowledgeable, prepared, and willing to puzzle through questions prompted by the material. It means helping us to take stock of where we've been each week, and where we're headed the following week. It also means being as responsive to your concerns as I can be.

To be available to you outside of class. I'll take a poll in class as to the 3 best times for office hours and I'll set that time according to what works best (majority %) for your schedules. *This is because I want these office hours to be helpful for you.* You can email, call (office landline: 413-545-7526), zoom video if sick/out of town (<https://umass-amherst.zoom.us/j/9443309761>), or meet in my office. You can generally expect a response to email within 24h. I check email 1x/day during the week; am in the office M-F 9-5p; and am not on Facebook.

To be transparent and clear about how you are being evaluated during the term. You should know how you're doing in the class. This syllabus gives you an overview of how your grade is calculated. I will be providing additional grading rubrics for response memos and research project assignments during the semester. You can check your grade anytime on the Moodle website at week's end, or email the TA. I will also post a grade calculator spreadsheet in the "Class documents" folder on Moodle so you can forecast what your grade will be if you were to get a [X] grade on assignment [Y].

COURSE SCHEDULE

Week 1: Class overview: How do we know what we know? (w/o January 21)

Wed, Jan 23: come to class having read syllabus & reviewed Moodle page!

Week 2: Linking Theory & Research (w/o January 28)

Mon, Jan 28:

- Chapter 1 *Art & Science of Social Research (A&S)* – Introduction
- Hume, David. 1740. Abstract of "A *Treatise of Human Nature*" (Moodle)

Wed, Jan 30: Chapter 2 *A&S* – Research Foundations

Week 3: Causality & Ethical issues (w/o February 4)

Mon, Feb 4

- Popper, Karl R. 1963. "Science as Falsification." (Moodle)
- Pearl, Judea & Dana Mackenzie. 2018. "From buccaneers to guinea pigs: The genesis of causal inference." Chapter 2, *The Book of Why: The New Science of Cause & Effect*. Basic Books. (Moodle)

Wed, Feb 6: Chapter 3 *A&S* – Ethical Issues

Week 4: Building blocks of research (w/o February 11)

Mon, Feb 11:

- Chapter 4 *A&S* – Hypotheses, Operationalization, Measurement
- Lieberman, S. and Lynn, F.B., 2002. "Barking up the wrong branch: Scientific alternatives to the current model of sociological science." *Annual Review of Sociology*, 28(1), pp.1-19. (Moodle)

Wed, Feb 13: Chapter 5 *A&S* – Reliability and Validity

***** *Research Project Part 1 (Identifying a research Q) due Fr, 2/15 to Moodle by 2p* *****

Week 5: Building blocks of research (w/o February 18)

Tues, Feb 19:

- Chapter 6 *A&S* – Sampling strategies (Monday schedule will be followed)
- Small, M.L., 2009. "How many cases do I need?" On science and the logic of case selection in field-based research." *Ethnography*, 10(1), pp.5-38. (Moodle)

Wed, Feb 20: Chapter 7 *A&S* – Survey Research

Week 6: Research approaches (w/o February 25)

Mon, Feb 25: Chapter 8 *A&S* – Experimental Research

Wed, Feb 27: Pager, D., 2003. The mark of a criminal record. *American Journal of Sociology*, 108(5), pp.937-975. (Moodle)

Week 7: Research approaches (w/o March 4)

Mon, March 4:

- Chapter 10 *A&S* – Ethnography
- Geertz, C., [1973] 2008. "Thick description: Toward an interpretive theory of culture." In *The Cultural Geography Reader* (pp. 41-51). Routledge. (Moodle)

Wed, March 6: In-class exam 1

***** *Research Project Part 2 (Choosing a Research Design) due Fr, 3/8 to Moodle by 2p* *****

Week 8: Spring Break (w/o March 11) – no class

Week 9: Research approaches (w/o March 18)

Mon, March 18: Chapter 11 A&S – In-depth interviewing

Wed, March 20:

- Chapter 12 A&S – Materials-based methods
- Lieberson, S., 1991. "Small N's and big conclusions: an examination of the reasoning in comparative studies based on a small number of cases." *Social Forces*, 70(2): 307-320. (Moodle)

Week 10: Analyzing & presenting results (w/o March 25)

Mon, March 25: Chapter 14 A&S – Univariate/bivariate analysis of quantitative data

Wed, March 27: Chapter 15 A&S – Multivariate analysis and advanced methods

Week 11: Analyzing & presenting results (w/o April 1)

Mon, April 1: Chapter 16 A&S – Analysis of qualitative data

Wed, April 3: Chapter 17 A&S – Communicating findings

***** Research Project Part 3 (Sampling Frame/Evidence) due Fr. 4/5 to Moodle by 2p *****

Week 12: An intentional circling back to *social mechanisms, social processes, and causality* so that these important concepts are on your mind while you're in the last stages of your research and starting to write up your results (w/o April 8)

Mon, April 8: Hedstrom, P. and Bearman, P., 2009. "What is analytical sociology all about? An introductory essay." *The Oxford handbook of analytical sociology*, pp.3-24. (Moodle)

Wed, April 10:

- Tilly, Charles. 2004. "Observations of social processes and their formal representations." *Sociological Theory*, 22(4), pp.595-602. (Moodle)
- Lieberson, S., 1997. "Modeling social processes: some lessons from sports." *Sociological Forum*, 12(1): 11-35. (Moodle)

Week 13 & 14: 5-minute research presentations (w/o April 15 & April 22)

- Monday schedule will be followed on Wednesday April 17
- Your presentation order will be determined by randomized selection.
- Students who aren't presenting will be giving targeted feedback to the presenter to improve their research project.

Wed, April 17, lecture – 8 students

Friday, April 19, Section A – 8 students; Section B – 8 students

Mon, April 22, lecture – 8 students

Wed, April 24, lecture – 8 students

Friday, April 26, Section A – 8 students ; Section B – 8 students

***** Research Project Part 4 (powerpoint slides) due to Moodle by midnight, day before presentation *****

Week 15: Concluding thoughts (w/o April 29)

Mon, April 29: Review / Wed, May 1: In-class exam 2

***** Final research projects (written version) due Monday, May 6 *****

UMass Amherst statement on academic honesty

Full statement: http://www.umass.edu/dean_students/academic_policy

All members of the University community must participate in the development of a climate conducive to academic honesty. While the faculty, because of their unique role in the educational process, have the responsibility for defining, encouraging, fostering, and upholding the ethic of academic honesty, students have the responsibility of conforming in all respects to that ethic.

Intellectual honesty requires that students demonstrate their own learning during examinations and other academic exercises, and that other sources of information or knowledge be appropriately credited. Scholarship depends upon the reliability of information and reference in the work of others. Student work in this class may be analyzed for originality of content, electronically or by other means. No form of cheating, plagiarism, fabrication, or facilitating of dishonesty will be condoned in the University community. Academic dishonesty includes but is not limited to cheating, fabrication, plagiarism, facilitating dishonesty among others.

UMass Amherst Office of Disability Services

The University of Massachusetts Amherst is committed to making reasonable, effective and appropriate accommodations to meet the needs of students with disabilities and help create a barrier-free campus. If you have a documented disability on file with Disability Services (www.umass.edu/disability), you may be eligible for reasonable accommodations in this course. If your disability requires an accommodation, please notify your instructors as early as possible in the course so that we may make arrangements in a timely manner.

Sexual Harassment, Sexual Assault, and Relationship Violence at UMass

As a faculty member I have a responsibility *to all students* to provide resources and assistance to anyone who wishes to disclose potential sexual misconduct. In July 2018 there was a recent change to Title IX UMass guidelines, such that 'regular faculty' such as myself are not mandated reporters (note: department heads or program directors – which I am not – still are mandated reporters). This means that anything you report to me will be kept private – the intent of this policy is to allow students to come to most (non-administrative) faculty with concerns and questions, and to talk openly and confidentially, so that we can help you.

Separately, students can also contact the Title IX office directly at eod@admin.umass.edu if they want to make a report, file a complaint, find out about resources and/or accommodations. Other resources include the Title IX webpage: <http://www.umass.edu/titleix/> and the Sexual & Relationship Violence Resource Guide: http://www.umass.edu/titleix/sites/default/files/documents/sexual_violence_resource_guide-09-15.pdf