Research Methods I Sociology 710 (Spring 2021 / Wed 4:00-6:30p, Thompson 919)¹ [Zoom meeting ID in Moodle announcements forum] Mark C. Pachucki, Ph.D. mpachucki@umass.edu Associate Professor, Department of Sociology University of Massachusetts, Amherst

At its foundation, a course on research design is fundamentally about the careful evaluation of evidence. It's about the *honest* evaluation of evidence. About the *transparent* evaluation of evidence, so that others might replicate and extend the research. About being *flexible* in evaluation of evidence – being open to new perspectives and different ways of addressing one's research question. It's about *humility* in the evaluation of evidence – because we don't, and can't know everything. Humility is needed because evaluation of evidence is sometimes frustratingly difficult, though the intellectual rewards can be great.

Content-wise, the purpose of this course is to help you think about how to do research, and to expose you to a sampling of the tremendous diversity of thought and approaches that are out there. Thus, there's research that we'll delve in for purposes of how it builds theory; we'll pick apart how various studies set up their research question; how other studies deal with ethics; how studies embrace or ignore marginalized voices and groups. We'll draw not just from some of our main general-interest disciplinary journals in sociology, but from general science venues, and from specialized research methods journals as well.

Process-wise, each week we'll pair one or two research exemplars with essays on the practical aspects of doing research. Given that we have such a wealth of terrific scholars in our department, I'm intentionally using this course as a chance to expose you, where possible, to examples of research from members of our community whose work speaks to a specific theme (though this would take a dozen courses to do justice!).

- This *isn't* a course in causality, but we'll wrestle with topics in causal thinking and social processes as fundamental to what we do as social scientists.
- This *isn't* a statistics class, but what you'll learn in here will articulate with what you're being exposed to in your statistics series.
- This *isn't* a qualitative methods course, but what we do here will articulate with our graduate qualitative methods courses, should you wish to take them.

• This *isn't* a writing course, but you'll get a sense for different kinds of 'good writing' – and some writing that you may take issue with.

• This *isn't* a course on data management, but we will likely jump into R and Stata to highlight elements of good practice to understand a particular manuscript, and/or you may need to inspect a secondary dataset to justify its use in your own project.

• This *isn't* a data visualization course, but we'll do exercises to help you strengthen your skills in this area.

• This *isn't* a course on Covid-19, but no aspect of academia and research has been left untouched by the pandemic, so expect it to be a common touchpoint.

¹ Final version 1/18/21. Please note that one or two readings later in the term may be substituted.

There is intentionally a lot for you to absorb here. Some of you may look back at this material during various points of your graduate career for reference in order go deeper and re-read something you didn't quite entirely grasp the first time. Or, you may reach back for a particular chapter when you teach your own courses, and so forth. Some of the pieces I've assigned may, at first, seem impenetrable, and there may be some technical details that you feel are way over your head. I ask you to try – with the knowledge that it's my goal to stretch your thinking to promote intellectual flexibility and to help you be a more critical scholar.

The format of the course is partially discussion-based, and partially practical application.

- a) <u>Discussion</u>: I will spend <1/2 hr each week in our face-to-face time giving points of historical background and context to how the work articulates with trends in our field, and each week two of you will lead a discussion based on a short list of questions you generate and circulate ahead of time intended to introduce key themes and tensions with the material. We'll spend the remainder engaging with questions raised by the discussants and previewing the following week's work. Discussion leaders should touch on conceptual and methodological contributions of the studies, how they articulate with prior approaches, and any challenging questions they raise. Each student will lead discussion twice during the term.
- b) <u>Guided memos</u>: everyone is required to write and submit a (max) 2-page memo (single-spaced, 12pt font) in response to prompts that will be distributed in class the week before. These will allow you to be systematic in engaging with material and training your ability to critique and expound upon aspects of the reading(s) that you found interesting, provocative, or problematic. Memos will be due to Moodle the following week by Wednesday @ 12n. There are 11 scheduled you only have to complete 10 of them. (Graded: Check-, Check, Check+)
- c) <u>Practical application</u>: one of the points of this course is prepare you to do research. Thus, we will have several assignments geared towards helping you develop your own research proposal. The assigned themes will be: (1) developing a research question, (2) putting together a human subjects proposal, (3) designing a survey or interview protocol, (4) executing a literature review, (5) data management and visualization. You will also submit a final research proposal, which should ultimately take the form of a 15-20 page "front end" of a research paper (which means everything except actually gathering data, analyzing it, and interpreting results). You can, and should, use this to inform your first comps paper, or to develop a grant proposal. A well-designed study will make the research much more interesting and impactful.

REQUIRED. ORDER EARLY FROM YOUR PREFERRED BOOKSELLER.

- Thinking through Methods John Levi Martin ~\$30.00 (new)
- *Evidence* by Howard Becker ~\$20.00 (new)

• *Measuring Culture* by John Mohr, Christopher Bail, Margaret Frye, Jennifer C. Lena, Omar Lizardo, Terence E. McDonnell, Ann Mische, Iddo Tavory, Frederick F. Wherry ~\$26.00 (new) *Grading*: 40% class participation & engagement (including your weekly reflections and leading discussion); 30% assignments (5 above, under 'practical application'); 30% final project.

Prerequisites: None, but for Sociology graduate students only. Others may email me for permission if there is room.

Pandemic impact: We're nowhere near out of the woods.² Which means that many individuals working in academia will continue to have high levels of stress, difficulty completing everyday tasks, persistent questions about employment, severe health consequences, and family and friends whose lives are severely compromised by Covid-19. If you're struggling, please let me know how I can help. My hope is that you can take care of yourself first so that your brain can be as open as possible to learning our craft. Be good to yourself. Be good to others. Be generous. We're in this together.

² As of this writing, Spring 2021 is a remote learning (via Zoom), rather than in-person model.

Feb 3 Week 1. How cause and effect shapes the research enterprise

- *Evidence* Chapter 1 ("Models of inquiry"), Chapter 2 ("Ideas, Opinions, and Evidence"), Chapter 3 ("How the Natural Scientists Do It.")
- Lieberson, 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.
- Watts, Duncan J. "Should social science be more solution-oriented?." *Nature Human Behaviour* 1, no. 1 (2017): 1-5.

Feb 10 Week 2. Theory Development

- Tilly, Charles. 2004. "Observations of social processes and their formal representations." *Sociological Theory*, 22(4), pp.595-602.
- Abend, Gabriel. "Making Things Possible." Sociological Methods & Research (2020).
- Smith-Doerr, Laurel, Donald Tomaskovic-Devey, Sharla Alegria, Kaye Husbands Fealing, and Debra Fitzpatrick. "Gender pay gaps in US federal science agencies: An organizational approach." *American Journal of Sociology* 125, no. 2 (2019): 534-576.
- Jung, Moon-Kie. "The Enslaved, the Worker, and Du Bois's Black Reconstruction: Toward an Underdiscipline of Antisociology." *Sociology of Race & Ethnicity* 5:2 (2019): 157-168.

Feb 17 Week 3. Research Design and Measurement (Part 1)

- *Thinking Through Methods*, Chapters 1 ("Sharpen Your Tools"), 2 ("How to Formulate a Question")
- Salganik, Matthew J., Ian Lundberg, Alexander T. Kindel, Caitlin E. Ahearn, Khaled Al-Ghoneim, Abdullah Almaatouq, Drew M. Altschul et al. "Measuring the predictability of life outcomes with a scientific mass collaboration." *Proceedings of the National Academy* of Sciences 117, no. 15 (2020): 8398-8403.
- Munafò, Marcus R., Brian A. Nosek, Dorothy VM Bishop, Katherine S. Button, Christopher D. Chambers, Nathalie Percie Du Sert, Uri Simonsohn, Eric-Jan Wagenmakers, Jennifer J. Ware, and John PA Ioannidis. "A manifesto for reproducible science." *Nature human behaviour* 1, no. 1 (2017): 1-9.

***Assignment 1. "Designing a research question", due by Friday Feb. 17 ***

Feb 24 Week 4. Measurement, Part 2 - date adjustment:

(this "Wellbeing Wed" class will be held Mon, 3/1. Memo and discussion Qs still due 2/24.)

- Measuring Culture, Intro ("Why Measure Culture?", Chapter 1 ("Measuring Culture in People"), Chapter 2 ("Measuring Culture in Objects")
- Curington, Celeste Vaughan, Jennifer Hickes Lundquist, and Ken-Hou Lin. "Tipping the Multiracial Color-Line: Racialized Preferences of Multiracial Online Daters." *Race and Social Problems* 12, no. 3 (2020): 195-208.
- Strmic-Pawl, Hephzibah V., Brandon A. Jackson, and Steve Garner. "Race counts: racial and ethnic data on the US census and the implications for tracking inequality." *Sociology of Race and Ethnicity* 4, no. 1 (2018): 1-13.

March 3 Week 5. Working with Human Subjects in Research

Thinking Through Methods, Chapter 6 ("Ethics in Research")

- Irvine, Janice M. "Can't Ask, Can't Tell: How Institutional Review Boards Keep Sex In The Closet." *Contexts* 11, no. 2 (2012): 28-33.
- Spector-Bagdady, Kayte, and Paul A. Lombardo. "US Public Health Service STD Experiments in Guatemala (1946–1948) and Their Aftermath." *Ethics & human research* 41, no. 2 (2019): 29-34.
- Garfinkel, Simson L. "Privacy and security concerns when social scientists work with administrative and operational data." *The ANNALS of the American Academy of Political and Social Science* 675, no. 1 (2018): 83-101.

Manning, Kimberly D. 2020. "More than Medical Mistrust." The Lancet, Vol. 396. 1481-2.

Suggested:

- Hibbin, Rebecca A., Grace Samuel, and Gjemma E. Derrick. "From "a fair game" to "a form of covert research": Research ethics committee members' differing notions of consent and potential risk to participants within social media research." *Journal of Empirical Research on Human Research Ethics* 13, no. 2 (2018): 149-159.
- Strassle, Camila, E. Jardas, Jorge Ochoa, Benjamin E. Berkman, Marion Danis, Annette Rid, and Holly A. Taylor. "Covid-19 vaccine trials and incarcerated people—The ethics of inclusion." New England Journal of Medicine 383, no. 20 (2020): 1897-1899.

***Assignment 2a – CITI program training – due by Friday March 5 ***

March 10 Week 6. Sampling, Cases, and Levels of Analysis

- Measuring Culture, Chapter 4 ("Pivots and Choices in the Process of Research")
- de Leon, Cedric. "The crisis sequence: The case of secessionism in Tuscaloosa County,
- Alabama." Journal of Historical Sociology 30, no. 3 (2017): 518-544.
- 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.
- Small, Mario Luis. "How many cases do I need?' On science and the logic of case selection in field-based research." *Ethnography* 10, no. 1 (2009): 5-38.

March 17 Week 7. Survey Research Methods

- *Evidence*, Chapter 4 ("Censuses"), 5 ("Data gathered by government employers to document their work), 6 ("Hired hands and nonscientist data gatherers"), 7 ("Chief Investigators and their Helpers")
- Alexander, Elizabeth C. "Don't know or won't say? Exploring how colorblind norms shape item nonresponse in social surveys." *Sociology of Race and Ethnicity* 4, no. 3 (2018): 417-433.

Suggested:

Sturgis, Patrick, Caroline Roberts, and Patten Smith. "Middle alternatives revisited: How the neither/nor response acts as a way of saying "I don't know"?." *Sociological Methods & Research* 43, no. 1 (2014): 15-38.

***Assignment 2b – IRB Protocol – due by Friday March 19 ***

March 24 Week 8. Experiments

Thinking Through Methods, Chapter 7 ("Comparing")

Student. "The Lanarkshire Milk Experiment." Biometrika, 23, no. 3/4 (1931): 398-406.

Pager, Devah. "The mark of a criminal record." Am. Journal Sociology 108:5 (2003): 937-975.

- Camerer, Colin F., et al. "Evaluating the replicability of social science experiments in Nature and Science between 2010 and 2015." *Nature Human Behaviour* 2, no. 9 (2018): 637-644.
- Centola, Damon. "An experimental study of homophily in the adoption of health behavior." *Science* 334, no. 6060 (2011): 1269-1272.

Suggested:

Gaddis, S. Michael. "Understanding the "how" and "why" aspects of racial-ethnic discrimination: A multimethod approach to audit studies." *Sociology of Race and Ethnicity* 5, no. 4 (2019): 443-455.

March 31 Week 9. Interviews and Focus Groups.

- *Thinking Through Methods*, Chapters 3 ("How do you choose a site?"), 4 ("Talking to People"), 5 ("Hanging Out")
- Evidence, Chapter 8 ("Inaccuracies in Qualitative Research")
- Cyr, Jennifer. "The pitfalls and promise of focus groups as a data collection method." Sociological methods & research 45, no. 2 (2016): 231-259.
- Deterding, Nicole M., and Mary C. Waters. "Flexible coding of in-depth interviews: A twentyfirst-century approach." *Sociological methods & research* (2018): pp 1-32.

Suggested:

- Lamont, Michèle, and Ann Swidler. "Methodological pluralism and the possibilities and limits of interviewing." *Qualitative Sociology* 37, no. 2 (2014): 153-171.
- Jerolmack, Colin, and Shamus Khan. "Talk is cheap: Ethnography and the attitudinal fallacy." *Sociological Methods & Research* 43, no. 2 (2014): 178-209.

***Assignment 3 – Survey Draft or Interview Protocol – due by Friday April 3 ***

April 7 Week 10. Historical approaches & field research

- Thayer, Millie. 2017. "The 'Gray Zone' Between Movements and Markets: Brazilian Feminists and the International Aid Chain." In "Beyond Civil Society: Activism, Participation, and Protest in Latin America". Duke University Press.
- Lara-Millán, Armando, Brian Sargent, and Sunmin Kim. "Theorizing with Archives: Contingency, Mistakes, and Plausible Alternatives." *Qualitative Sociology* 43, no. 3 (2020): 345-365.
- Parvez, Z. Fareen. "The sorrow of parting: Ethnographic depth and the role of emotions." *Journal of Contemporary Ethnography* 47, no. 4 (2018): 454-483.
- Young, Kathryne M. "Masculine compensation and masculine balance: Notes on the hawaiian cockfight." *Social Forces* 95, no. 4 (2017): 1341-1370.

Suggested:

Mahoney, James. "Comparative-historical methodology." Annu. Rev. Sociol. 30 (2004): 81-101.

Demetriou, Chares. "Processual comparative sociology: Building on the approach of Charles Tilly." *Sociological Theory* 30, no. 1 (2012): 51-65.

April 14 Week 11. Network Analysis: date adjustment: (this "Wellbeing Wed" class will be held Tues 4/20. Memo and discussion Qs still due 4/14.)

Measuring Culture, Chapter 3 ("Measuring Culture in Social Relationships")

- Kitts, James A., and Diego F. Leal. 2020. "What is(n't) a friend? Dimensions of the friendship concept among adolescents." *Social Networks*. In press.
- Hill, Katherine Michelle. "Sweet and Sour: Social Networks and Inequality in a Chinese Restaurant." *Sociology of Race and Ethnicity* 4, no. 1 (2018): 114-127.
- Block, Per, Marion Hoffman, Isabel J. Raabe, Jennifer Beam Dowd, Charles Rahal, Ridhi Kashyap, and Melinda C. Mills. "Social network-based distancing strategies to flatten the COVID-19 curve in a post-lockdown world." *Nature Human Behaviour* (2020): 1-9.

***Assignment 4 – Literature Review – due by Friday April 16 ***

April 21 Week 12. Computational Social Science

- Kramer, Adam DI, Jamie E. Guillory, and Jeffrey T. Hancock. "Experimental evidence of massive-scale emotional contagion through social networks." *Proceedings of the National Academy of Sciences* 111, no. 24 (2014): 8788-8790.
- Freese, Jeremy. "The arrival of social science genomics." *Contemporary Sociology* 47, no. 5 (2018): 524-536.
- Lazer, David MJ, Alex Pentland, Duncan J. Watts, Sinan Aral, Susan Athey, Noshir Contractor, Deen Freelon et al. "Computational social science: Obstacles and opportunities." *Science* 369, no. 6507 (2020): 1060-1062.

Suggested:

Okbay, Aysu, Jonathan P. Beauchamp, Mark Alan Fontana, James J. Lee, Tune H. Pers, Cornelius A. Rietveld, Patrick Turley et al. "Genome-wide association study identifies 74 loci associated with educational attainment." *Nature* 533, no. 7604 (2016): 539-542.

***Assignment 5 – Data management & visualization – due by Friday April 23 ***

April 28 Week 13. Project presentations

Thinking Through Methods, Chapter 9 ("Interpreting it and writing it up") *Measuring Culture*, Conclusion ("The Future of Measuring Culture")

In this class session, you will publicly summarize (in 10 minutes) your final project, lessons learned, and next steps. This will serve as a workshop of sorts, and allow you to integrate feedback from myself and your peers in time for the final paper submission.

***Final papers due Monday, May 10 ***

All students in this class must adhere to the American Sociological Association's Code of Ethics. Violations of this code will not be tolerated. <u>http://www.asanet.org/code-ethics</u>

All students in this class must adhere to the Department of Sociology's values statement (see next pages).

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 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. 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 Policy Against Discrimination, Harassment, and Related Interpersonal Violence:

http://www.umass.edu/titleix/sites/default/files/documents/policy_against_discrimination_harass ment_and_related_interpersonal_violence-rev_aug-14-2020.pdf Values Statement Department of Sociology University of Massachusetts, Amherst

The Department of Sociology at the University of Massachusetts, Amherst is committed to creating and maintaining an inclusive and equitable department. We ask that all members of the Sociology community -- faculty, staff, and students -- be mindful of our responsibility to create an environment that is welcoming to all, and where each person feels accepted, included, seen, heard, valued, and safe. We recognize that learning how to be inclusive and respectful is an iterative process and sometimes we all act in imperfect ways. As sociologists, we are aware that we are all inheritors of systems of inequality, whether to our advantage or our disadvantage. We also acknowledge that we each are privileged in various ways. We strive to create safe spaces to encourage productive dialogue with the goal of learning from our mistakes and changing for the better.

We strive for excellence in all we do. True excellence requires each individual to be able to work and learn in an atmosphere of respect, dignity, and acceptance. Our commitment to equity and inclusion requires each of us to continuously ensure that our interactions be respectful. We recognize that marginalized groups of people have unique experiences in the Pioneer Valley and within the larger society. We are committed to making our department a place that counteracts, to the best of our abilities, those processes of marginalization, and that inspires academic freedom and creativity.

Whenever and wherever possible, our department will affirm this commitment to values that oppose racism, sexism, homophobia, xenophobia, transphobia, classism, and hatred based on religious identity publicly and explicitly. As a department dedicated to social justice, we will take very seriously reports, formal or informal, of harassment and discrimination. We will make every effort to ensure that this commitment manifests in our department's policies, programs, and practices.

In the Department of Sociology, we:

• Value equity, inclusion, and dignity for all.

- Insist on a culture of respect and recognize that words and actions matter. The absence of action and words also matter.
- Encourage respectful expression of ideas and perspectives.
- Will not tolerate sexism, racism, homophobia, transphobia, xenophobia, and other overt and covert forms of prejudice and discrimination.
- Share in the responsibility to create a positive culture and to safeguard equity, inclusion, dignity, respect, and safety for all. Each member of our community faculty, staff, and students should be a role model for others.
- Will take action when we observe people being treated unfairly or in a demeaning manner.
- Envision and strive to foster an inclusive, welcoming department.