DATA FOR PUBLIC POLICY PUBPOL 750.005 | 475.005

A One Credit Course Winter Semester 2023

Gerald R. Ford School of Public Policy The University of Michigan

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Office Hours virtual or by appointment



Dr, Data AKA Lisa Neidert with her new license plate



Ren Farley at Comerica to watch the Tigers on a cold April afternoon.

This syllabus is current as of January 24,2023. Students will be notified if/when it is updated.

Ordinary people with extraordinary vision can redeem the soul of America by getting in what I call good trouble, necessary trouble. Voting and participating in the democratic process are key.

The vote is the most powerful nonviolent change agent you have in a democratic society. You must use it because it is not guaranteed. You can lose it. (Congressman John Lewis is an Op-ed Essay in the New York Times, August 4, 2020)

Covid is almost behind us at the university level, but at the individual level, there are still covid exposures and illnesses. Because of this we will continue to be flexible about requirements and deadlines this semester. We do expect students to attend class in person, unless there is an illness or family emergency. Please check with us if you have any covid-related issues. We very much want you to complete this course.

COURSE CONTENT AND OBJECTIVES

Since the founding of this Republic in 1776, the country's leaders have gathered data about the nation to govern and to assign federal resources. A decennial census is constitutionally mandated so that the amount of power each state has in Congress corresponds to the state's population size. James Madison envisioned a comprehensive census in 1790 which would measure the nation's resources. This did not happen given the difficulties inherent in just canvassing the country to gather the rudimentary details included in the first census. Over time, the decennial census expanded its content, but so too did data collected by other statistical agencies – vital statistics, diseases, and health (National Center for Health Statistics); economic indicators (Bureau of Labor Statistics); inflation (Bureau of Economic Analysis) agricultural productivity and land ownership (Department of Agriculture); petroleum reserves and energy prices (Energy Information Agency). There is also a major effort to collect data about crimes, criminal justice, and criminal victimization (Bureau of Justice Statistics).

Since the earliest days of the Republic, Congress has been allocating funds to local areas for specific purposes. In the early 1800s, the government funded canal building and, fifty years later, railroad construction. To settle rural areas, railroads were given much free land on either side of the tracks they laid down. Data the federal government collected helped shape federal policies that created the nation where we reside today.

This marriage of data and policy implementation was stimulated when Franklin Roosevelt became president and the federal government began allocating federal monies to states to solve pressing national problems such as unemployment, poverty, mortgage defaults and disease. The Great Depression, for the first time, led the federal government to develop specific policies for local areas in distress. These federal appropriations greatly increased between 1947 and the late 1970s. During the 1960s and early 1970s, for the first time, massive federal funds became available for local education, for transportation in cities, to provide food to the impoverished, for child health and to support the college education of students. Very many of those federal programs allocated funds to states based on data linked to the decennial census. At present, the federal government disperses about \$1.7 trillion dollars every year to states and local governments based on formulae that are linked to, but not necessarily gathered by the decennial census and to annual, population estimates prepared by the Census Bureau. The state of Michigan now obtains about \$27 billion each year in federal revenue sharing.

This one credit course will offer an overview of some of the key statistical agencies, the indicators they produce, and the data they disseminate. Students will gain practical

experience with locating and analyzing data – primarily federal government data-for policy purposes.

COURSE FORMAT

This course will consist of seven class meeting in Room 3117 of the Ford School. Some classes will be primarily in the lecture format but two of the classes will involve using the computers in that classroom to obtain data from the websites of federal agencies and data providers. The lectures will describe important national policy issues and provide information about one or more statistical agencies and some of the measures they regularly produce. On occasion we will describe partisan influence and advocacy, which are actions these agencies strive to avoid. Congress funds the federal statistical agencies and determines which data they will collect, how it will be collected and how often. There have been and will continue to be political controversies about how to measure such things as poverty, unemployment, and homelessness. At present, the Census Bureau is making decisions about two about two very controversial issues: how to ask the gender question and how to ask the question about a person's race. Some in Congress will have strong opinions about how those questions should or should not be asked.

The lab sessions will introduce students to data produced and disseminated by the federal statistical system – our data infrastructure. The first lab will introduce students to tabular data, while the second will introduce students to microdata. In neither case do students need to have any programming or statistical skills although we hope you realize that these will be useful tools to master. Tabular data are limited to what the agencies publish. In the old days, these were printed products. Now they are also available electronically, which allows users to sort the data. The tabulations are usually limited to at most 3-way tabulations, with all the decisions about the cuts (such as age) already made. The advantage of tabular data is that it can go down to low levels of geography, like census tracts. These are small geographic areas defined by the Census Bureau containing, in 2020, about 3900 residents and 1700 housing units.

Microdata are granular. They include the responses on each item that was asked – education, income, occupation, etc. This allows users to create their own tabulations, run statistical models with multiple control variables, etc. A user can determine whether men and women; or Blacks and Whites who are employed as teachers or police officers earn about the same amounts. There are two disadvantages to microdata. First, they don't go down to low levels of geography (to protect the confidentiality of respondents). *All federal data are carefully coded to protect the identity of the person who filled out the census or responded to a questionnaire. Those procedures ensure that no individual can be*

identified from the responses she gives to a federal government survey. Second, microdata usually require programming expertise. In this course, we will use online tools so that skill is not required.

In each lab you will have several choices to work from. The tutorials will provide a starting point for you to produce a table or graph and to write a concise summary of your findings.

The final project will be to develop either the first or second lab into a larger project (several tables/figures). We want these to be short – no more than 3 pages. If you desire, you can choose a completely different project. It does not have to be an expansion of either of the labs. Unsure? Ask us.

We are very flexible about this assignment. Basically, we hope you will consider a public policy issue that strongly interests you such as childhood poverty or, perhaps, gender or racial differences in earnings or college completion. We hope you will assemble a few data to support a policy that you might advocate or data to support your view that a current policy should be terminated or greatly revised. We realize this pandemic is disrupting all our lives. We can be very flexible about deadlines should that be helpful to you.

Please speak up in class and let us know what your policy interests are. We would like to help you access the data you need to analyze your interests. It is possible that data exist in one of the little-known government agencies or by a private non-profit or a commercial organization.

Assignment	Value	Due Date
First Lab	25%	Friday, Feb 17
Second Lab	25%	Friday, Feb 24
Final Project	50%	Friday March 3

Your final grade is based on:

PLEASE NOTE THAT ALL ASSIGNED READINGS ARE AVAILABLE ON THE CANVAS SITE FOR THIS COURSE. YOU DO NOT NEED TO PURCHASE ANY BOOKS. MANY OF THE RECOMMENDED READINGS ARE SHORT NEWSPAPER ESSAYS OR BRIEF REPORTS. WHERE THERE ARE MORE THAN A FEW PAGES, WE HAVE INDICATED THE LENGTH. YOU ARE NOT GOING TO BE TESTED ON THESE READINGS BUT WE HOPE THAT YOU WILL EXAMINE THEM. IF YOU HAVE A POLICY ISSUE THAT IS NOT MENTIONED IN THIS SYLLABUS, PLEASE LET US KNOW. WE WILL BE HAPPY TO RECOMMEND A FEW SHORT READINGS IF WE CAN.

CLASS MEETINGS AND RECOMMENDED READINGS

Wed, Feb 1	Lecture 1
	Importance of Data for Governance
Room 3117	Brief History of the Federal Statistical System
Weill Hall	
	<u>Readings</u>
	William Davies. " <u>How statistics lost their power – and why we should fear what</u> <u>comes next.</u> " <i>The Guardian</i> (Jan 19, 2017)
	Perry, Andre, and Katherine Guyot. " <u>Threats to Government Data are Threats to</u> <u>Democracy.</u> " <i>Government Executive</i> (Feb 8, 2018).
	Sullivan, T. " <u>Coming to our Census: How Social Statistics Underpin our Democracy</u> (and Republic)," Harvard Data Science Review (13 pages)
	Rampell, Catherine. "Trump shouldn't close the doors on government data."
	Washington Post [Opinion] (January 9, 2017)
	Cohen, Patricia. " <u>How Economic Data is Kept Politics-Free</u> " <i>The New York Times</i> (Nov 3, 2016).
	SKIM , <u>Appendix B: Organization of the Federal Statistical System</u> (pages 174-187) from National Academies of Sciences, Engineering, and Medicine 2017. <u>Principles and Practices for a Federal Statistical Agency</u> Washington, DC: The National Academies Press.
Mon, Feb 6	Lecture 2
Room 3117 Weill Hall	Bad Mouthing Federal Statistics: The Monthly Jobs Numbers The Federal Poverty Measure: Why it is a Fish out of Water.
	Readings Casselman, Ben. Casselman, Ben. "Making Sense of the Jobs Report: It's not always easy." The New York Times (Feb 1, 2018).
	Casselman, Ben. " <u>Three Rules to Make Sure Economic Data Aren't Bunk.</u> " <i>FiveThirtyEight</i> blog (Mar 17, 2017).
	Moulton, Brent. " <u>How reliable are the employment/unemployment data</u> ? <i>Political Arithmetick</i> blog (Mar 9, 2017).
	Blank, Rebecca. 2008. " <u>Presidential Address: How to Improve Poverty</u> <u>Measurement in the United State</u> s." <i>Journal of Policy Analysis and</i> <i>Measurement</i> Vol 27 (2): 233-254.
	Pascale, Celine-Marie Pascale, " <u>The Federal Poverty Line Struggles to</u> <u>Capture the Economic Hardships that One-Half of American Face</u> " <i>The</i> <i>Conversation</i> ; (Nov 10, 2021) (6 pages) <i>The New York Times</i> (Feb 1, 2018).

	 Salwati, Nasiha, and David Wessel. 2021. "<u>How Does the Government Measure Inflation</u>?" <i>Brookings</i> (June 28, 2021) Blinder, Alan. 2023. "<u>What if Inflation Dropped and No One Noticed</u>?" <i>WSJ</i> (Jan 5, 2023). Blank, Rebecca. 2008. "<u>Presidential Address: How to Improve Poverty Measurement in the United State</u>s." <i>Journal of Policy Analysis and Measurement</i> Vol 27 (2): 233-254.
Wed. Feb 8	Lecture 3
Room 3117 Weill Hall	<i>Telling Stories with Mortality Data</i> <i>Deaths of Despair</i> <i>Gun Deaths</i>
	<u>Readings</u> Case, Anne, and Angus Deaton. "Deaths of Despair and the Future of Capitalism. <i>Princeton University Press</i> , 2020. Table of Contents Chapter 3. Deaths of Despair Chapter 16. What to Do?
	Baumgartner, Jesse. " <u>The Drug Overdose Toll in 2020 and Near-Term Actions for</u> <u>Addressing It</u> ." <i>The Commonwealth Fund</i> (August 16, 2021).
	Kornfield, Meryl and Lenny Bernstein. 2021. "CVS, <u>Walgreens and Walmart are</u> <u>responsible for flooding Ohio counties with pain pills, jury says</u> " <i>Washington Post.</i> (November 23, 2021).
	Barry-Jester, Anna. " <u>As U.S. Life Expectancies climb, people in a few places are dying younge</u> r." <i>FiveThirtyEight</i> blog (May 8, 2017).
	Casselman, Ben, Matthew Conlen, and Reuben Fischer-Baum. " <u>Gun Deaths in</u> <u>America</u> " <i>FiveThirtyEight</i> blog.
	Reeves, Richard, and Sarah Holmes. " <u>Guns and race: The different worlds of</u> <u>black and white America</u> " <i>Brooking</i> s (Dec 15, 2015).
	Dickerson, Kelly. " <u>There's a depressing reason why there is so little definitive</u> <u>scientific research on guns</u> " <i>Business Insider</i> (Jun 23, 2016).
	Baumgartner, Jesse and David C. Radley, " <u>The Drug Overdose Toll in 2020 and Near-</u> <u>Term Actions for Addressing It</u> " <i>Commonwealth Fund</i> (Aug 21, 2021) Approximately 6 pages.
	U. S. Bureau of Justice Statistics, <u>Criminal Victimization 2020</u> (Aug 2021), 16 pages

	Press Release from the Centers for Disease Control about Decline in Life Expectancy from 2020 to 2021 (2 pages
Fri, Feb 10	Lab 1
Room 3117 Weill Hall	Introduction to Tabular Data from multiple statistical agencies Seeded Scenarios The Lowest Unemployment Rate Ever – Compared to what? Low Labor Force Participation Rates: Let's control for Education. Geographic Distribution of Opioid Deaths Gun Laws: Do they make a difference? Gun Deaths: Geography and Race
Mon, Feb 13	Lecture 4
Room 1230 Weill Hall	Results from the 2020 Census Practical Application: The City of Detroit Readings Blake, Aaron. "Which states gain and lose in the new census report? Here are 3 takeaways." Washington Post (April 26, 2021). Bump, Philip. "The 2020 Census bolsters the power of Southern states in the House" Washington Post (April 27, 2021). Wu, Denise. "It Only Takes a Few People to Change Your State's Congressional Seats" New York Times (May 1, 2021). Frey, William H. "New 2020 Census Results show increased diversity continuing decade-long declines in white and youth populations" Brookings Institution (August 13, 2021) Poston, Dudley. "3 big ways that the US will change over the next decade" The Conversation (January 2, 2020). The Learning Network. "What's Going On in This Graph?" New York Times (October 1, 2020). Ellington, Andre. "Detroit Mayor Mike Duggan Says City Undercounted In Census By 10 Percent, Plans Legal Action". Newsweek (August 13, 2021). Shannon, Josh. "Census undercount could have lasting ramifications for Newark" Newark Post (September 22, 2021) Poston, Dudley L., and Rogelio Sáenz. "How Texas lost a House seat and billions of dollars" San Antonio Express News. (November 7, 2021). Corroy, Patrick, et.al. "Analysis Of The Census 2020 Count In Detroit" University of Michigan: Poverty Solutions (December 16, 2021). [Press release]

Wed, Feb 15	Lecture 5
Room 3117	Big Data Data Confidentiality
Weill Hall	<u>Readings</u> Lazer, David " <u>What we can learn from the epic failure of Google Flu Trends</u> ." <i>Wired</i> (October 1, 2015).
	Cukier, Kenneth, and Viktor Mayer-Schonberger. 2013. " <u>The Dictatorship of</u> <u>Data</u> ." <i>MIT Technology Review</i> (May 31. 2013).
	Nagle, Nicholas. " <u>Census 2020 will protect your privacy more than ever – but</u> at the price of accuracy" <i>The Conversation</i> (April 6, 2020).
Fri, Feb 17	Lab 2 Session #2
	Introduction to Microdata from multiple statistical agencies
Room 3117	Seeded Scenarios
Weill Hall	Why Do Women Earn Less than Men? Occupation
	Occupations by Sex over time
	Let's do this again: Labor Force Participation Rates for Prime Age Men BONUS CONTENT on the DECENNIAL CENSUS & CENSUS BUREAU
	TBA – Recorded lectures/slides from Farley & Neidert
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Ford School Inclusivity Statement: Members of the Ford School community represent a rich variety of backgrounds and perspectives. We are committed to providing an atmosphere for learning that respects diversity. While working together to build this community we ask all members to:

- share their unique experiences, values, and beliefs.
- be open to the views of others.
- honor the uniqueness of their colleagues.
- appreciate the opportunity that we have to learn from each other in this community.
- value one another's opinions and communicate in a respectful manner.
- keep confidential discussions that the community has of a personal (or professional) nature.

• use this opportunity together to discuss ways in which we can create an inclusive environment in Ford classes and across the UM community

Ford School Public Health Protection Policy: In order to participate in any aspects of this course--including meeting with other students to study or work on a team project--you must follow all the public health safety measures and policies put in place by the State of Michigan, Washtenaw County, the University of Michigan, and the Ford School. Up to date information on U-M policies can be found <u>here</u>. It is expected that you will protect and enhance the health of everyone in the Ford School community by staying home and following self-isolation guidelines if you are experiencing any symptoms of COVID-19

Student Mental Health and Wellbeing: The University of Michigan is committed to advancing the mental health and wellbeing of its students. We acknowledge that a variety of issues, both those relating to the pandemic and other issues such as strained relationships, increased anxiety, alcohol/drug problems, and depression, can directly impact students' academic performance and overall wellbeing. If you or someone you know is feeling overwhelmed, depressed, and/or in need of support, services are available.

You may access counselors and urgent services at <u>Counseling and Psychological</u> <u>Services</u> (CAPS) and/or <u>University Health Service</u> (UHS). Students may also use the Crisis Text Line (text '4UMICH' to 741741) to be connected to a trained crisis volunteer. You can find additional resources both on and off campus through the <u>University Health Service</u> and through <u>CAPS</u>.

Accommodations for Students with Disabilities: If you believe you need an accommodation for a disability, please reach out to U-M <u>Services for Students with</u> <u>Disabilities (SSD)</u> office to help determine appropriate academic accommodations and how to communicate about your accommodations with your professors. Any information you provide will be treated as private and confidential.

Academic Integrity: The Ford School academic community, like all communities, functions best when its members treat one another with honesty, fairness, respect, and trust. We hold all members of our community to high standards of scholarship and integrity. To accomplish its mission of providing an optimal educational environment and developing leaders of society, the Ford School promotes the assumption of personal responsibility and integrity and prohibits all forms of academic dishonesty, plagiarism,

and misconduct. Academic dishonesty may be understood as any action or attempted action that may result in creating an unfair academic advantage for oneself or an unfair academic advantage or disadvantage for any other member or members of the academic community. Plagiarism involves representing the words, ideas, or work of others as one's own in writing or presentations, and failing to give full and proper credit to the original source. Conduct, without regard to motive, that violates the academic integrity and ethical standards will result in serious consequences and disciplinary action. The Ford School's policy of academic integrity can be found in the MPP/MPA, BA,