Program for Public Policy Studies (PPS)
College of Arts and Science
Tentative Syllabus and Course Information

Fall 2021
Research Methods for Public Policy Analysis
PPS 3200-01

Syllabus Last Updated: August 30, 2021

Credits:	3 credits
Meeting Days:	Monday & Wednesday
Meeting Time:	11:30 – 12:45 PM
Meeting Place:	Wilson Hall #120
Instructor:	**Gilbert Gonzales, Ph.D., M.H.A.**
	Department of Medicine, Health & Society, Vanderbilt University
	Department of Health Policy, Vanderbilt University Medical Center
	Program for Public Policy Studies, Vanderbilt University
	Office Hours: By appointment
	Email: gilbert.gonzales@vanderbilt.edu
Teaching Assistant:	**Cameron Deal**
	Office Hours: Buttrick 341: Tuesdays from 4-5 PM and Thursdays from 1-2 PM (also available outside of these hours; contact me by email)
	Email: cameron.h.deal@vanderbilt.edu

I.   Course Description

This course provides and overview of research methods commonly used in public policy. Contemporary public policy researchers face grand challenges, including climate change, global pandemics, food insecurity, economic inequalities, and national security. Unfortunately, these issues persist amid great political divisions—both in the United States and around the world. In order to prepare students for diverse careers in public policy and administration, this course introduces students to the public policy process, how to collect and analyze data for public policy research, and creatively designing evidence-based policy options for policymakers to consider. Topics include the policy process, research methods and designs, creating deliverables for research and policy audiences, and data management, cleaning, and analysis.

II. Course Prerequisites

This course is initially open to juniors and seniors who are PPS students. Students should have some experience with performing basic statistical calculations as well as interpreting the results.

III. Course Goals and Objectives

The goal of this course is to provide students with the skills necessary to pose researchable public policy questions, identify existing data to answer public policy questions, turn data into a usable file format, understand the data documentation, analyze the existing data appropriately, and communicate the findings consistent with the standards of the public policy research community.

Upon completion of this course, students will be able to:

1. Describe the public policy process and how to conduct public policy research using secondary data sources in Stata.
2. Develop personal expertise with specific policy issues and key policy options for addressing these issues.
3. Demonstrate core research competencies, including conducting literature reviews, background research, and data collection and analysis.
4. Develop your research writing skills and ability to produce professional policy research reports (including policy briefs and executive summaries).
5. Improve your public speaking skills through oral presentations of research findings.
6. Improve your skills at providing constructive feedback and working in a team environment.

IV. Methods of Instruction and Course Expectations

This class will utilize a variety of learning techniques, including guest lectures, technology-based communication strategies, online debates, and "flipped" and active learning assignments. This course is intended to impart health care policy and management skills while fostering an environment of peer learning and collaboration as professionals and colleagues. Students are expected to attend class, come prepared for active participation, and to provide thoughtful input into class discussion. Lectures and class-based discussions are grounded in the assigned readings, so please complete the weekly reading assignments before each class. Your preparation and participation are vital to the success of the course, and thus are important components of your grade for the class.

V. Course Texts and Readings

The following books are required and available online or at the Vanderbilt University Barnes and Noble Bookstore:

1. Majchrzak & Markus. (2014). Methods for Policy Research, 2nd Edition.
   https://www.amazon.com/Methods-Policy-Research-Socially-Responsible/dp/1412997801

VI. Grading

Assignment	Percent of Final Grade
Stata Lab Assignments (5)	20%
Public Policy Research Paper (1 draft, 1 final version)	30%
Policy Brief & Op-Ed (1 draft, 1 final version each)	15%
Student Presentations (2)	10%
Attendance, Participation, and Team-Based Activities	15%
Journal Methodology Reviews	10%

Stata Lab Assignments. A common requirement for entry-level policy analyst positions is to "have prior experience with Stata, R, SAS and/or other quantitative coding software." This course will teach you how to use Stata for policy research, which is common in public policy, economic, and public health careers. You have two options for downloading Stata on your laptop or computer (since computer labs are closed during the pandemic). You can either purchase a student user license which ranges from $48 for a 6-month license to $595 for a perpetual license. I recommend an annual or perpetual Stata MP license if you intend on going to graduate school or working in public policy research methods. If not, I will provide you a temporary Stata license during the course and will expire at the completion of this course. Additionally, you can explore the VMWare Client that the Heard Library offers to remotely access Stata: https://libanswers.library.vanderbilt.edu/faq/290980. These lab assignments will be completed throughout the course and class time will be dedicated to completing them. Each student may work through the assignments with 1-2 of their peers, but each student must submit their own work. You will submit your assignments in the format of a log file.

Public Policy Research Paper. The capstone project of this course is an independent and student-led research study on a public policy issue of their choice. Students will complete of a series of short papers and data tables that present empirical data informing a specific policy-relevant research question using the General Social Survey or the National Health Interview Survey. These papers will build off one another to form the core of an empirical research paper or report, which includes the following sections: (1) Introduction and Literature Review, (2) Data and Methods, (3) Descriptive Statistics and Results, and (4) Conclusions and Limitations. In combination the final product will be a journal quality manuscript limited to 3,500 words or less. There will be ungraded assignments throughout the semester where you must submit a draft of the sections of the paper—these are mainly to keep you on track to complete the paper.

Policy Brief. Each student will summarize their research to a 1-2 page policy brief that includes an overview of the public policy problem, data and visualizations, and policy recommendations for addressing the issue.

Op-Ed. Each student will create a concise opinion piece about a specific policy they recommend that includes an overview of the public policy problem, data and visualizations, and policy recommendations for addressing the issue. This should be oriented towards general audiences and readership and 1-2 pages long.

Journal Methodology Reviews. During the literature review for their final policy research project, students should pick two articles that have differing methodologies (quantitative vs. qualitative analysis) and identify the methodology, evaluate its effectiveness, and outline its limitations. Then, each student will present their findings to the class with a short slide deck so everyone is exposed to a vast array of methodologies that could then be used for their final research project.

Student Presentations. Students will complete two presentations on their policy research project. The first presentation will present preliminary findings on your policy research project. All students will receive feedback on their analysis and drafts of their policy briefs. Students will present their final results and final, polished policy briefs in a final presentation at the end of the course.

Attendance & Course Participation. Because of the importance of participation for group activities, regular attendance is essential, not only for a good grade but for meaningful engagement with the course material. Multiple unexcused absences (more than two) will negatively affect your grade. Punctuality is also essential, as it demonstrates professionalism, so students who consistently arrive late or leave early may also risk recognition of their class participation. In the event of illness, life events, observed holidays, or athletic and interview-related travel, please contact me as soon as possible, and please be prepared to provide written documentation of your absence.

Grading Scale. Your final grade is determined based on a 100-point scale. Final grades represent the percentage of points earned though active participation, professional products, and excellent execution of the individual and group projects. Letter grades will be assigned as following:

A	94.0-100	C+	77.0-79.9
A-	90.0-93.9	C	74.0-76.9
B+	87.0-89.9	C-	70.0-73.9
B	84.0-86.9	D	60.0-69.9
B-	80.0-83.9	F	≤59

VII.   Tentative Course Schedule

Unit 1: Introduction to Public Policy Research Methods

8/25   **Introduction to Research Methods for Public Policy Analysis**

What is policy research?

Please review this Encyclopedia.com definition: https://www.encyclopedia.com/social-sciences/dictionaries-thesauruses-pictures-and-press-releases/policy-research

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8/30   **Lecture: Introduction to Data, Evidence, and the Policy Process**

Keywords: policy process, agenda setting, policy formulation, decision making, policy implementation, policy evaluation, responsible policy research.

Required Readings: Majchrzak & Markus. (2014). "Make a Difference With Policy Research." In *Methods for Policy Research*, (pp. 1-14).

Tollefson J. (2020). "How Trump Damaged Science — And Why It Could Take Decades to Recover." *Nature*, (pp. 190-194). Available here: https://www.nature.com/articles/d41586-020-02800-9

9/1   **Stata Lab: Introduction to Stata (Assignment 1)**

Keywords: do-file, log file, Stata commands

Required Readings: Introducing Stata – Sample Session. https://www.stata.com/manuals13/gsw1.pdf

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9/6   **Lecture: Policy Research Methods: An Insider's View From Beginning to End**

Keywords: Research question, the M2 test (meaningful and manageable), policy relevance, causal models.

Required Readings: Majchrzak & Markus. (2014). "Launch the Policy Research Process." In *Methods for Policy Research*, (pp. 15-40).

Please skim or read the following examples:

Professor Gonzales' study on LGBT health disparities in JAMA Internal Medicine: https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2530417

Rush Limbaugh criticizing Professor Gonzales' study on his radio show: https://www.rushlimbaugh.com/daily/2016/06/29/you_re_going_to_be_hearing_this_soon_conservatives_make_gays_unhealthy/

Professor Gonzales' letter on marriage equality at the New England Journal of Medicine (NEJM): https://www.nejm.org/doi/full/10.1056/NEJMp1400254

The NEJM editors cite Professor Gonzales in support of marriage equality before the Supreme Court's landmark decision in Obergefell v. Hodges:
https://www.nejm.org/doi/full/10.1056/NEJMe1505179

Professor Gonzales' op-ed at The Tennessean:
https://www.tennessean.com/story/opinion/contributors/2016/04/01/discriminatory-laws-hurt-health-lgbt-tennesseans/82435690/

9/8	**Stata Lab: Cleaning Data (Assignment 2)**

Keywords: Transforming variables, labels, replace function, tab function

Required Readings: Labeling Data | Stata Learning Modules.
https://stats.idre.ucla.edu/stata/modules/labeling-data/

Creating and Recoding Variables | Stata Learning Modules.
https://stats.idre.ucla.edu/stata/modules/creating-and-recoding-variables/

9/13	**Lecture: Literature Reviews & Identifying Secondary Data Sources**

Keywords: Systematic reviews, randomized control trials, cohort studies, case-control studies, case studies, prospective studies, retrospective studies, longitudinal data, cross-sectional data.

Required Readings: Majchrzak & Markus. (2014). "Synthesize Existing Evidence." In *Methods for Policy Research*, (pp. 41-62).

Tips on writing a literature review:

Literature Reviews – UNC Writing Center
https://writingcenter.unc.edu/tips-and-tools/literature-reviews/

The Literature Review: A Few Tips On Conducting It – University of Toronto
https://advice.writing.utoronto.ca/types-of-writing/literature-review/

Connecting Research to Your Writing – Vanderbilt University
https://www.vanderbilt.edu/writing/wp-content/uploads/sites/164/2016/10/Connecting-Research-to-Your-Writing.pdf

Information about citation managers:

Zotero: Why Should I Use A Citation Manager
https://www.youtube.com/watch?v=k_jSDBBNUpo

Citation Management: Welcome
https://researchguides.library.vanderbilt.edu/citation-management

9/15	**Work Period: Think about the research question you want to answer with your project and find an appropriate data source.** **Required Readings**: Majchrzak & Markus. (2014). "Launch the Policy Research Process." In *Methods for Policy Research*, (pp. 63-92). Formulating Your Research Question. https://www.vanderbilt.edu/writing/wp-content/uploads/sites/164/2016/10/Formulating-Your-Research-Question.pdf
9/20	**Lecture: Complex Surveys & Survey Weights** **Keywords:** svy, svyset, psu, strata **Required Readings**: Notes on the Pew Research Methods Weighting Procedures. https://www.pewresearch.org/methods/2018/01/26/for-weighting-online-opt-in-samples-what-matters-most/
9/22	**Stata Lab: Survey Weights and T-tests (Assignment 3)** **Keywords**: Box plots, box and whisker plots, interquartile range, outliers, bar charts, strip charts, spurious relationships, confounders, mediators, moderators, additive relationships, interactive relationships. **Required Readings**: Analysis and Variance Estimation with IPUMS NHIS. https://nhis.ipums.org/nhis/userNotes_variance.shtml How do I use the Stata Survey (svy) Commands? https://stats.idre.ucla.edu/stata/faq/how-do-i-use-the-stata-survey-svy-commands/ **For more extensive information**: Applied Survey Data Analysis https://stats.idre.ucla.edu/stata/seminars/applied-svy-stata13/
9/27	**Journal Methodology Presentations** Please identify one quantitative study and one qualitative study from your literature review and identify the pros and cons of each study in 2-3 PowerPoint slides. Each student will share their findings and comparisons in class.
9/29	**Stata Lab: Descriptive Statistics (Assignment 4)** **Keywords**: mean, standard deviation, standard error, 95% confidence interval, lincom command, t-test, chi-square test, tabout **Required Readings**: Descriptive Information and Statistics. https://stats.idre.ucla.edu/stata/modules/descriptive-information-and-statistics/ IPUMS NHIS – User Note: Variance Estimation. https://nhis.ipums.org/nhis/userNotes_variance.shtml **For more extensive information:** Publication quality tables in Stata: A Tutorial for the TABOUT Program. https://ianwatson.com.au/stata/tabout_tutorial.pdf

10/4	**Careers in Public Policy Research — Q&A with Policy Wonks**
	
	 <u>Guest Speakers</u>: Erin O'Hara, Tennessee Education Research Alliance
	                      Many Pellegrin, The Sycamore Institute
	                      Robert Hest, State Health Access Data Assistance Center (SHADAC)
	
	 <u>Required Readings</u>:
	 MPP vs. MPA: What's the Difference? – Northeastern University
	 https://publicaffairs.northeastern.edu/articles/master-public-policy-mpp-vs-master-public-administration-mpa/
	
	 7 Steps to a Career in Public Policy – LinkedIn
	 https://www.linkedin.com/pulse/7-steps-career-public-policy-erica-mattison

10/6	**Lecture: Conducting and Interpreting Linear and Logistic Regression** **Required Readings:** What is Regression? Logistic Regression (Pgs. 5-16) Interpreting Regression Coefficients Interpreting Odds Ratios
10/11	**Stata Lab: Regression, Correlation, and Dummy Variables (Assignment 5)** https://stats.idre.ucla.edu/stata/webbooks/reg/chapter1/regressionwith-statachapter-1-simple-and-multiple-regression/
10/13	**Reading Day** **(Optional Class Meeting)** We are living in stressful times. Your assignment is to rest, relax, catch up with work, meditate, and/or engage in other healthy coping mechanisms. This day is dedicated to you and your mental and physical health.
10/18	**Lecture: How to Read and Write Peer-Reviewed Manuscripts, Policy Briefs, and Op-Eds** Majchrzak & Markus. (2014). "Design Policy Recommendations." In *Methods for Policy Research*, (pp. 93-116).
10/20	**Work Period: Clean the variables of interest for your public policy research project or generate preliminary analyses.**
Unit 2: Preparing for a Career in Public Policy Research
10/25	**Special Topics: Field Experiments and Obtaining International Data** Guest Speakers: Ben Harrell and Sam Mann (Postdoctoral Scholars, Economics and Public Policy Research)

10/27	**Mid-Term Data Updates: Descriptive statistics and initial regression results.** Student Data Presentations (required) & Draft Policy Briefs (optional)
11/1	**Mid-Term Data Updates: Descriptive statistics and initial regression results.** Student Data Presentations (required) & Draft Policy Briefs (optional)
11/3	**Special Topics: Making Maps, Figures, and Visualizations in Stata** Guest Speaker: Professor Tara McKay (confirmed—in Wilson 120)
11/8	**Special Topics: What Data and Research Do Lawmakers Want and Need?** Guest Speaker: TN State Representative John Ray Clemmons (confirmed—on Zoom) Majchrzak & Markus. (2014). "Expand Stakeholder Engagement." In *Methods for Policy Research*, (pp. 117-136).
11/10	**Special Topics: Stories & Personal Narratives (Qualitative Research)** Guest Speaker: Nathaniel Tran (confirmed)
11/15	**Work Period: Please bring your data to analyze and troubleshoot issues.** Please bring your data. Clean the variables of interest for your public policy research project or generate preliminary analyses, including multivariable regression models.
11/17	**Lecture: Reflections on Public Policy Research Methods (15 minutes)** Majchrzak & Markus. (2014). "Reflect on the Policy Research Voyage." In *Methods for Policy Research*, (pp. 137-148). **Work Period (60 minutes):** Please bring your data. Clean the variables of interest for your public policy research project or generate preliminary analyses, including multivariable regression models.
11/23	**Thanksgiving Holiday**
11/25	**Thanksgiving Holiday**
11/29	**Final Student Presentations, Policy Briefs, and Op-Eds Due**
12/1	**Final Student Presentations, Policy Briefs, and Op-Eds Due**
12/6	**Final Student Presentations, Policy Briefs, and Op-Eds Due**

12/8	**Reading Day**
	(No Class Meeting)
	We are living in stressful times. Your assignment is to rest, relax, catch up with work, meditate, and/or engage in other healthy coping mechanisms. This day is dedicated to you and your mental and physical health.

VIII. Other Course Information and Policies

Academic Integrity. Students are expected to be familiar with and adhere to the honor code (available at http://www.vanderbilt.edu/student_handbook). The honor code applies to all work for this class. All written work must contain appropriate citations and attributions of quoted and source material. Information on plagiarism and citation is available at http://studentorgs.vanderbilt.edu/honorcouncil/infostud.php. Plagiarism or cheating will result in either an F or no credit for the assignment and may be reported to the Honor Council for further action. Please see me with any questions about citation.

Accommodation and Access. Vanderbilt University is committed to providing reasonable accommodations for all persons with disabilities that may affect your ability to complete course assignments or otherwise satisfy course requirements. If you require course accommodations due to a disability, if you have emergency medical information to share with me, or if you need special arrangements in case the building must be evacuated, please contact me and the Office of Equal Opportunity, Affirmative Action, and Disability Services (615-322-4705) as soon as possible. To request accommodations from the Disability Services Program, see Vanderbilt's Reasonable Accommodations Request Process: http://www.vanderbilt.edu/ead/ds_students.html or call the number above. You are also encouraged to meet with the instructor(s) privately in regards to this matter, ideally no later than the second week of the semester, so that we can ensure that your needs are met appropriately and in a timely manner.

Electronics. The use of laptops and tablets to view readings and take notes is allowed. Texting or using the internet for non-class activities such as Facebook or email is not allowed and will negatively affect your participation grade.

Mental Health and Stress Management. As a student, you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance and may reduce your ability to participate in daily activities. Vanderbilt University services are available to assist you. You can learn more about the broad range of confidential mental health services available on campus via the Psychological and Counseling Center's Website: https://medschool.vanderbilt.edu/pcc/.

Academic Freedom and Responsibility. Academic freedom is a cornerstone of the University. Within the scope and content of the course as defined by the instructor, it includes the freedom to discuss relevant matters in the classroom. Along with this freedom comes responsibility. Students are encouraged to develop the capacity for critical judgment and to engage in a sustained and independent search for truth. Students are free to take reasoned exception to the views offered in any course of study and to reserve judgment about matters of opinion, but they are responsible for learning the content of any course of study for which they are enrolled. Reports of concerns about academic freedom are taken seriously, and there are individuals and offices available for help. Contact the instructor, the Department Chair, your adviser, the associate dean of the college, or the Vice Provost for Learning and Residential Affairs in the Office of the Provost.

Diversity and Inclusion. This course recognizes and values the diversity found in organizations and across human populations. In order to achieve respectful dialogue that maximizes student learning, the diversity that the students and the instructor bring to the class will be celebrated as an asset and resource. Therefore, course materials and learning activities will be respectful of all dimensions of diversity, including (but not limited to) race, ethnicity, gender identity, gender expression, sexual orientation, disability, age, socioeconomic status, religion, culture, political ideology, and alternative perspectives. Please let me know if you require accommodations or have suggestions for improving diversity and diverse perspectives in the classroom.

IX. Example Data Sources

Students are suggested to use data from ONE of the following (free) demographic or health surveys to conduct their research, which will be determined by the student's health policy research question.

Survey Name	American Community Survey (ACS)	Current Population Survey (CPS)	Behavioral Risk Factor Surveillance System (BRFSS)	National Health Insurance Survey (NHIS)	Medical Expenditure Panel Survey (MEPS)
Sponsor	U.S. Census Bureau	U.S. Census Bureau	Centers for Disease Control & Prevention (CDC)	National Center for Health Statistics, CDC	Agency for Healthcare Research & Quality
Sample Size	~3 million people each year	~200,000 each year	~450,000 each year	~100,000 each year	~36,000 each year
Target Population	Entire U.S. population	Civilian non-institutionalized population	Civilian non-institutionalized population age 18+	Civilian non-institutionalized population	Civilian non-institutionalized population
Data Collection Mode	Mail, telephone, in-person and internet	In-person and telephone interviews	Telephone interviews	In-person interviews	In-person interviews with data verified by medical providers
Primary Focus	General household survey, replaced decennial census long form	Labor force participation and unemployment	Population health, risk factors and health behaviors	Population health	Health care access, utilization and cost
Topics	• Employment status, salary, job occupations • Housing characteristics • Educational attainment • Veteran status • Health insurance coverage • Disability	• Employment status, salary, job occupations • Public program participation • Health insurance coverage • Disability • Self-reported health status • Out-of-pocket health spending	• Health insurance and access to care • Alcohol and tobacco use • Physical activity, nutrition & obesity • Chronic health conditions • Cancer screenings	• Health insurance and access to care • Health behaviors • Physical and mental health conditions • Health services utilization	• Health insurance and access to care • Health behaviors • Physical and mental health conditions • Health care services utilization and expenditures
Levels of Geography	National, state, and sub-state	National, state, and some sub-state	National, state, and some sub-state	National and census region	National and census region

Note: All surveys include basic demographic and socioeconomic information, including data on age, race/ethnicity, immigration status, marital status, family and household characteristics, educational attainment and employment status.