Working with National Data Sets to Inform Policy Analysis and Recommendations

Fall 2018

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Room 359, Heller Brown

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Website: LATTE. Brandeis.edu

Course Description
The field of social policy requires data for policymaking, research, program planning and evaluation, advocacy, and education. The wealth and increase in availability of comparable data across the U.S. and beyond enable trained researchers to inform policymaking and program analysis, as well as to conduct academic research. This course provides an introduction on how to best approach planning and working with large national data sets.

The full semester MPP class builds on the courses in Applied Regression Analysis, Econometrics, Research Methods, and concentration course work. It provides MPP students in-depth and hands on experience using large national data sets to conduct policy analyses. The course will guide students through the each step of the process of developing and carrying out a research project. More specifically, the course will provide practical/applied applications of how to find appropriate data, download and prepare data for analyses, and conduct appropriate statistical analyses to answer pressing policy questions. Students will identify research questions of their own interest to guide the inquiry, and they will learn how to review elements of national data sets, download and create subsets of datasets, compute new variables, and conduct a series of basic or more advanced statistical analyses.

The more hands-on-work will be complemented with relevant readings related to the method as well as examples of findings used in the development of published policy reviews and briefs. Students will write up the findings from their own research and will present them at the end of the term. The class will examine how the different elements combined contribute to new knowledge. This work may potentially provide the basis or a component of the MPP students’ Capstone Policy Analysis Paper, or for PhD students it may support preliminary data analysis for dissertation proposals.
In particular students will:
- Learn how to work with large datasets (mostly PSID but other datasets will be introduced as well)
- Gain greater mastery of STATA or SPSS and statistical analysis within a policy context.
- Learn how to craft policy recommendations based on the results of the statistical analyses.
- Have the option to work together as a team to conceptualize the research question, including determining relevant literature review and variables of interest.

Prerequisite: Successful completion of regression analyses or other advanced statistics class and research methods

Course Readings
There is no text book for this course. Assigned course readings are available on LATTE. Students are also encouraged to draw upon readings and text books assigned in prior statistics and research methods courses. Readings may change from current list depending on students’ concentrations and interests in the class.

Assignments
There will be two written assignments, a research proposal and a final paper and three oral presentations, on one national data sets, assigned readings, and statistical findings and policy implications of students’ individual projects. Each assignment needs to be properly presented with cited information following APA format. Details for each assignment, the presentation and final research paper will be presented in class.

Grading
Class presentations (3) 30 %
Research Proposal 20 %
Final Research Paper 40 %
Participation/Reading Responses 10 %
100 %

Course Attendance
Students are expected to attend all class sessions. If a student is unable to attend a class, they need to notify me ahead of time. Students missing a class are expected to write a 3-5 page response to the readings or other material covered in class, and submit this assignment before the next class. There are exception to this requirement for extraordinary circumstances (e.g. death in the family, severe illness)

Academic Integrity
Academic Integrity is central to the mission of education excellence at Brandeis University. Each student is expected to turn in work completed independently, except when assignments
specifically authorize collaborative effort. It is not acceptable to use the words or ideas of another person without proper acknowledgement of that source.

This means that you must use footnotes and quotation marks to indicate the sources of any phrases, sentences, paragraphs or ideas found in published volumes, on the internet, or created by another student. Violations of university policies on academic integrity, described in Section 3 of Rights and Responsibilities, may result in failure in the course or on an assignment, and could end in suspension from the University. If you are in doubt about the instructions for any assignment in this course, you must ask for clarification.

Accommodations
If you are a student with a documented disability on record at Brandeis University and wish to have a reasonable accommodation made for you in this class, please let me know. If you have any religious observances that will conflict with class attendance or assignment-dates please let me know at the start of the semester to arrange modifications.

Heller School Policy on Use of Computers in the Classroom
Laptops may be used in Heller classrooms at the discretion of the course instructor. The instructor may ban them or restrict their use. In no case shall students use laptops for purposes other than taking notes or other instructor approved tasks. No engagement in netsurfing, email, Facebook, tweeting, or other distractions for yourself or fellow students should occur during class time. If this does occur I would ask all students to take responsibility to ask the individual to close the applications or bring it to my attention. Please see the Heller handbook for policies and procedures for clarification of this policy.

Cell Phones
Please turn off all cell phones and beepers before coming to class. If you are experiencing an emergency and need to be reachable, please let me know before class.
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<tr>
<th>Date</th>
<th>Topic/Readings/Assignments</th>
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<tr>
<td>29 August</td>
<td>Introduction and overview of course. Discussion of students’ research interests and beginning to develop research agenda around them. Review elements of the research cycle. General overview on national data sets.</td>
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|             | **Required Readings:**  
| 5 September | Introduction to national cross-sectional data sets (e.g. CPS, NHIS) that cover health, mental health, wealth, youth, and other data elements related to students’ research interests. Student presentations                                      |
| 12 September| Introduction to national longitudinal data sets (e.g. PSID, HRS) that cover health, mental health, wealth, youth, and other data elements related to students’ research interests. Student presentations                                      |
| 19 September| NO CLASS                                                                                                                                                                                                                 |
| 26 September| Review of important concepts in variable measurement and sampling. **Required Readings:**  
|             | Earl Babbie. The Practice of Social Research, 10th ed.  
|             | Chapter 5: Conceptualization, Operationalization, and Measurement  
|             | Chapter 7: The Logic of Sampling  
|             | Padraic Murphy (2008). An Overview of Primary Sampling Units (PSUs) in Multi-Stage Samples for Demographic Surveys. Joint Statistical Meeting – Section on Government Statistics  
|             | Presentation on access and download national data. Review the different downloading procedures for different data sets in STATA and SPSS and how to create value labels and create working data sets with select variables. |
3 October
Assessing the quality of target data in different surveys is critical to deciding what data set to use for research projects. The assigned readings will demonstrate examples on how to assess data quality and discuss the challenges in collecting accurate income and asset data. In addition, we will discuss how to best prepare for and document the steps once a project working with large data sets has begun.

*Required Readings:*


*Recommended Readings:*

Guest speaker: Emily Wiemers, Ph.D. Professor of Economics, UMass Boston

10 October
Approaches to improving Data Quality/Review of Survey Questions and Procedures to Improve Response Rates. We continue our discussion on documenting critical steps while working with national data sets.

**DUE: Email problem statement and a set of research questions based on PSID or other** data to Professor Meschede for review and feedback.

*Required Readings:*
Pleis, JR, Cohen, RA. Impact of Income Bracketing on Poverty Measures Used in the National Health Interview Survey’s Early Release Program: Preliminary Data from the 2007 NHIS.


*Research Project: Begin downloading data*

Example of data and code for completed research projects
https://www.openicpsr.org/openicpsr/psid
17 October

Missing data are a common problem in secondary data sets. We will discuss strategies to address missing responses in survey data and the role of sample weights in estimating population parameters.

*Required Readings:*

*Recommended Readings:*


**Research Project:** *Exploratory data runs on selected variables and descriptive presentation of core variables to assess quality of data.*

24 October

**DUE:** Research Proposal, 5 pages double spaced, that includes a set of at least three related research questions using data from PSID or another data set, and a brief summary of at least three articles (at least one needs to be peer reviewed) relevant to students’ research questions. Include a list of specific variables to answer students’ research questions suggestion from the two data sets. Submit via email the assignment to Professor Meschede.

Guest speaker: Clemens Noelke, Institute for Child, Youth and Family Policy

**Research Project:** *Examine and document the extent of missing data for the variables of interest for your proposed study. Devise strategies on how to address missing data.*

31 October

Intergenerational Analyses in Panel Studies.

*Required Reading:*
A Family Affair: Intergenerational Social Mobility across OECD Countries Economic Policy Reform: Going for Growth, OECD 2010
Date                  Topic/Readings/Assignments

31 October cont.     Recommended Reading:
intergenerational persistence of lifetime earnings with life course
matching: Evidence from the PSID. Labour Economics.

Research Project: Finalize data set, conduct and write up descriptive results

7 November            Quality of Health Measures Across Surveys

Required Reading:
Helen Levy (2007). Health Insurance Data in the PSID. Institute for Social
Research, University of Michigan. PSID Technical Paper Series No. 07-05

Recommended Readings:
Patti Andreski, Kate McGonagle, and Robert Schoeni
(2009). Analysis of the Quality of the Health Data in the Panel Study
of Income Dynamics. Institute for Social Research, University of
Michigan. PSID Technical Paper Series No. 09-02

Nelson. DE et.al. (2003). A Comparison of National Estimates From the
National Health Interview Survey and the Behavioral Risk Factor

Research Project: Conduct and write up multi-variate results

14 November           From Data to Policy/Merging Survey and Administrative Data/Access to
restricted data

Guest speaker: Joanna Taylor, PhD candidate, Heller School

Required Readings:
Using Survey Data Matched with Administrative Data from the Social
Security Administration. Section on Government Statistics – JSM: 147-157

Recommended Readings:
Carr, MD, and Wiemers, EE (2016). The Decline in Lifetime Earnings
Mobility in the U.S.: Evidence from Survey-Linked Administrative Data. The
Washington Center for Equitable Growth.

Research Project: Finalize analyses
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<th>Date</th>
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<tr>
<td>21 November</td>
<td>No class – Thanksgiving Break</td>
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<tr>
<td>28 November</td>
<td>Review outstanding data management and analyses approaches. Begin presentation of student research projects, findings, and implication for policy.</td>
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<tr>
<td>5 December</td>
<td>Presentation of student research projects, findings, and implication for policy.</td>
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<tr>
<td><strong>15 December</strong></td>
<td><strong>DUE Final Research Paper</strong>, including the statistical program (i.e. SPSS syntax, STATA program) documenting all data analyses presented in the final paper, clearly organized with titles and comments.</td>
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