SYLLABUS
New York University
Steinhardt School of Culture, Education and, Human Development
EDPLY-GE 2050 Capstone: Applied Research in Education Policy
Kimball Hall
ASH Third Floor Conference Room
Meryle Weinstein
Meryle.weinstein@nyu.edu
212-998-5817
Fall 2017

Prerequisites
P11.2902, Regression and Introduction to Econometrics
RESCH-GE 2110 Applied Statistics: Using Large Databases in Education
EDPLY-GE 2025 Economics of Education

This course synthesizes material from courses in economics, sociology and statistical methods in an integrative project centered on a regression-based, empirical analysis of a current, policy relevant issue in education. Data will come from a variety of sources, including the prerequisite course -- Applied Statistics: Using Large Databases. Students will work in teams to design and perform a research study developed with a concern for data availability, importance of problem, and ability to ascertain causal relationships. Projects will be designed and written for a particular "clienteles" in the policy community. Emphasis will be placed on the appropriate use of the data set, the methodology, and documenting the research in a written form that will be understood by and useful for the intended audience. The development of effective and efficient teams that utilize and build upon the experience, skills and interests of team members is an integral part of the successful completion of the course.

The purpose of this course is to guide students through the design, performance and presentation of a well-specified, policy relevant empirical research project. The written report that is the end product of this research carries the greatest weight in determining the grade; however, each student's final grade will also depend upon his or her class and team participation, interim reports, the presentations made in class and at the end event and the final paper. Both the research project and the report will be completed as part of a team.

Examples of Datasets that can be used in the Course

Schools and Staffing Survey - http://nces.ed.gov/surveys/sass/
National Educational Longitudinal Survey http://nces.ed.gov/surveys/nels88/
See http://nces.ed.gov/surveys/ for other datasets
State databases such as California, New York:
https://reportcards.nysed.gov/
http://www.ed-data.k12.ca.us/Pages/Home.aspx
Examples of Possible Topics

1. Do high performing peers affect a student’s achievement in high school mathematics? A study using the National Education Longitudinal Study (NELS).
2. Do differences in early childhood education affect first grade student academic achievement in reading and mathematics? A study using the Early Childhood Longitudinal Study (ECLS).
3. Using data from NELS:88, how do high school characteristics influence college completion rates for American students?
4. Using the data from the Educational Longitudinal Survey (ELS), how does social and emotional learning (SEL) impact the academic achievement of high school students.

Required Readings:

None

Recommended Texts:


You should also use your texts from P11.2902 and RESCH-GE 2110. You might also benefit from using a writing guide, such as Strunk and White's *Elements of Style*.

Learning objectives

The research capstone integrates and enhances learning in several areas: research methods for analyzing and reporting data, knowledge of an education issue area, and process skills in project and team management. Learning objectives are:

A. Research

Students will learn to:
- identify and implement appropriate data analysis methods for their project;
- situate their project and findings in the broader related literature;
- draw appropriate conclusions based on their findings;
- communicate their work effectively both orally and in writing.

A. Content

Students will learn to:
- understand the policy context for their project;
- be familiar with specialized vocabularies required to perform the project successfully;
- be aware of critical research related to their content area;
- be capable of positioning and evaluating their project within its broader policy context.
B. **Project Management**

Students will learn to:
- frame and refine the research question;
- develop a research work plan with timelines and deliverables;
- monitor their progress against the work plan;
- revise the work plan as necessary.

C. **Team Management**

Students will learn to:
- develop clear task descriptions for team members;
- manage team assignments and accountability;
- advocate points of view and negotiate differences of opinion;
- solicit and offer feedback.

**Deliverables**

**Assignment #1 (3 pages)**
An informal paper that covers the following:
- Your topic of interest
- 2-3 researchable and policy-relevant questions (note that research questions are typically of the form “How much does X influence Y”, or “To what extent do changes in X change Y”?)
- Data source(s) for the project – what are the possibilities?
- Weaknesses, pitfalls, and potential problem areas – what strategies will you use to address these?

**Assignment #2 (Paper)**
A five page paper that covers as much as possible of the following:
- Context: policy/management background for your research problem
- Research question (or questions, if you haven’t settled on a single question)
- Causal model: identifies your independent and dependent variables of interest, and notes any important covariates that you’ll include in your model
- Design: type of design and identification of unit of analysis.
- Data source: describes the information that you’ll be using and how you’re going to get the data. Provides information about the sample that you’ll use in your analyses. Notes the number of cases, number of years.
- Measures: states how you will operationalize your IV, DV, covariates.
- Analysis plan: describes the analytic approach you will be using. Discuss your plan for multivariate work.
- Identification of weaknesses, pitfalls and problem areas, and strategy for addressing these. Many of these are likely to be related to your data source and measures. Pay attention to your sample size and data quality and assess the likelihood of getting the datasets and variables that you want to have. (Not included in the presentation)
- Identifies team members who will take primary responsibility for: lit search, data acquisition, preliminary data management, initial descriptive analyses, detailed analyses including multivariate work, preparation of tables, and drafting of each section of the report. The team
should be satisfied that those taking primary responsibility have the requisite skills, or have a strategy for acquiring them. Includes tentative timeline for these tasks.

Assignment #3: Progress Report (3 pages written + tables)
- Progress in any of the areas from your second project description
- If available, descriptive statistics (numbers of cases; means; frequencies) from your sample. Don’t neglect these – they are basic but important!
- Identification of weaknesses, pitfalls and problem areas, and strategy for addressing these

Assignment #4: Final Presentation (30 minute presentation; 15 minutes for questions and discussion)
- You must use PowerPoint

Assignment #5: Present poster at graduation

Assignment #6: Submit paper

Assignment #7: Return Group Evaluation Form (if applicable)
<table>
<thead>
<tr>
<th>Class No.</th>
<th>Date</th>
<th>Topic</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9/5</td>
<td>Syllabus/Team formation/Topics</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>9/12</td>
<td>Research Questions/Literature Reviews/Measurement</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>9/19</td>
<td>Work on your own</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>9/24</td>
<td>Work on your own</td>
<td>Assignment #1</td>
</tr>
<tr>
<td>5</td>
<td>10/3</td>
<td>Work on your own</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>10/10</td>
<td>Work on your own</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>10/17</td>
<td>Work on your own</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>10/24</td>
<td>Work on your own</td>
<td>Assignment #2</td>
</tr>
<tr>
<td>9</td>
<td>10/31</td>
<td>Required meeting with professor</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>11/7</td>
<td>Work on your own</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>11/14</td>
<td>Work on your own</td>
<td>Assignment #3</td>
</tr>
<tr>
<td>12</td>
<td>11/21</td>
<td>Work on your own</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>11/28</td>
<td>Presentations</td>
<td>Assignment #4</td>
</tr>
<tr>
<td>14</td>
<td>12/5</td>
<td>Presentations</td>
<td>Assignment #4</td>
</tr>
<tr>
<td></td>
<td><strong>Week of 12/11</strong></td>
<td><strong>Poster and Graduation Party</strong></td>
<td>Assignment #5</td>
</tr>
<tr>
<td>12/19</td>
<td>Final Paper Due 5pm</td>
<td>Assignment #6</td>
<td></td>
</tr>
<tr>
<td>12/22</td>
<td>Group Evaluation Form (if applicable)</td>
<td>Assignment #7</td>
<td></td>
</tr>
</tbody>
</table>
- Capstone takes a lot of outside time. Project cannot be completed by email alone or just meeting in class

- Everyone needs to participate – that’s why it’s called a team project and you will be graded on team participation. You’re expected to show up for team meetings that are scheduled, team meetings with me and participate in all. Expectation is that everyone will present in final presentation.

- Good idea to decide on roles for each person. But, this doesn’t mean other people can’t be included on other tasks. For example, if one person is going to be the main data analyst, it’s fine for someone else to try to do analysis to confirm results.

- One person should be responsible at the end for proofreading before submission. Paper should be in one voice

- You will be given a chance to grade your team mates.