COURSE OVERVIEW:
We will cover a series of advanced methodological topics in this course. While the subject material in this course is varied, all of the topics we will cover are directly related to the ongoing research of the graduate students taking the course. We will usually spend 2-3 weeks covering each topic. For most of what we cover, the assigned readings will only cover an introduction to the subject. As we progress, I will highlight the necessary additional reading if you are applying a particular method in your own research. We will also explore software implementation, and as usual, we will work primarily with Stata and R – other software will be demonstrated as necessary.

GRADING
Paper: 60%
Presentation and Participation: 40%

Each student will be responsible for presenting original research once during the semester. Most of our meetings will have two separate components – a lecture from me to start, and then the second half will be a workshop session for a student paper. The student presentations should last 20-30 minutes and focus on the methodological issues of the project – the rest of the time will be a class critique of the work. A draft of the paper, full dataset, and replication materials will be distributed to the class one week prior to the presentation. Two students will also be assigned as discussion leaders for each presentation. We will work as a class through whatever methodological and substantive issues arise during the presentation.

A revised version of the presented paper will be submitted to me no later than May 12th. The revision should account for the issues raised in our discussion.

SCHEDULE OF TOPICS

1) Categorical Dependent Variables

Readings:


2) Interactive Hypotheses

Readings:


3) Missing Data

Readings:


Note: see also the documentation and related literature for Amelia II and ICE – we will have lengthy tutorials for both.

4) Treatment Effects and Matching Methods

Readings:


Note: see the documentation for MatchIt and Coarsened Exact Matching as well as the discussion of the Seguro Popular Evaluation project.

5) Structural Equation / Measurement Models

Readings:


6) Limited Outcomes & Selection Bias Models
Readings: TBA

7) Count Models

Readings: TBA