Public Affairs 8782
Seminar in Policy Modeling John
Glenn School of Public Affairs The
Ohio State University
Spring 2015

INSTRUCTOR Craig Boardman
TIME/LOCATION Wednesdays, 9AM-12PM/240 Page Hall
CONTACT boardman.10

COURSE DESCRIPTION
This course focuses on the logic and practice of social science research design and methods as these pertain to policy analysis, management research, and program evaluation. Learning the logic and practice of research design and methods will equip you to critically assess the research literature in your field of study and also help you to design and implement credible research of your own.

After completing this course satisfactorily you will possess understanding of the following:
A. Different types of research questions one may ask and the research designs these questions imply.
B. Different types of research designs and the types of data sets these designs imply.
C. Different types of data sets and the analytic methods these data sets imply.
D. Different types of knowledge claims you can (and cannot) make for the different “question-design-data-methods” combinations you may encounter (see A-C). Before getting to A-D, during the first 3 weeks you will become familiar with basic concepts and issues in research design. During these two weeks we will cover the entirety of the material that I cover in Public Affairs 6080, the MPA course on program evaluation at the Glenn School. The MPA course is on Wednesdays from 5:30-9:30 and I encourage you to attend the first few weeks if you are not already somewhat familiar with the following concepts: internal validity, external validity, construct validity, statistical validity, conclusion validity, measurement validity, measurement reliability, probability sampling, random assignment, and random selection. The course is full, so you may need to bring your own chair.

It is important to clarify what the current course (Public Affairs 8782) is not. The course is not a forum for the philosophical debate over the possibility of ever actually observing causal relations. While this debate is valid and can be interesting, it does not help to ready you to become professional researchers, academic or otherwise. Another thing this course is not is a pure methods course. Though we will certainly discuss a variety of methods, weekly, there will not be time to delve into the technical minutiae of the methods we will discuss.

REQUIRED TEXTS
To purchase online:

To access free:
  1. Go to [http://library.ohio-state.edu/screens/databases.html](http://library.ohio-state.edu/screens/databases.html) and search for “Sage Research Methods Online.” Log in first using your OSU lastname.# and password if prompted to do so.
  2. Click *Sage Research Methods online*.
  3. Title search for “The SAGE Handbook of Applied Social Research Methods.”

**COURSE STRUCTURE, REQUIREMENTS, and ASSIGNMENTS**

Informed attendance is required for participation in class discussions. Students should come prepared to each class having read the assigned material. Each week students will be required to present a summary of one or more of the required readings. Please discuss with me any problems/uncertainties you may have with the course readings or other aspects. If you have difficulty with an assignment, see me before it is due, preferably early enough for me to help you with it.

The assignments for this course are as follows:
• Participation – 20% of final grade
• Research proposal – 40% of final grade
• Final exam – 40% of final grade

The final exam is intended to mimic the comprehensive exam experience, specifically the “unstructured problem” part of the comprehensive exam. The research proposal is intended to mimic the dissertation proposal and/or a grant proposal.

While it is unreasonable to expect your exam and proposal for this course to be at the same level of quality as is expected when you take comprehensives and defend your proposal (after this course, next academic year), my feedback will be as if these assignments were your actual comprehensive exam responses and dissertation proposals, respectively. My purpose in doing so is twofold: 1) to highlight areas of weakness in your preparation that 2) will guide you in your preparation as you transition from your current status as doctoral student to that of doctoral candidate and, eventually, Doctor of Philosophy in public affairs.

Participation will be assessed by not just the frequency but also by the quality of your contributions to in-class discussion. Participation will also be assessed in part by the quality of your presentation of the assigned readings. Each week you will be required to present one or more of the readings to the rest of the class; for the readings you present, you will also be required to write a 1-2 page summary of each reading you present.

The following grading scale will be used:
93 – 100 = A, 90 – 92.9 = A-, 87 – 89.9 = B+, 83 – 86.9 = B, 80 – 82.9 = B-, 77 – 79.9 = C+, 73 – 76.9 = C, 70 – 72.9 = C-, 67 – 69.9 = D+, 60 – 66.9 = D, <60 = E.
COURSE OUTLINE

I. Weeks 1 and 2 (Jan 14, 21)... Basic concepts and issues: the basic causal model, the elements of research design, validity (internal, external, measurement, construct, statistical, conclusion), sampling (probability and derivations thereof, other approaches), planning research projects, the importance of theory and past research findings to planning and modeling
   a. Readings to complete before class
      i. Shadish et al., Chapters 1-3, Chapter 5 p. 156-160 [Text]
      ii. Bickman and Rog, Chapters 1-4 [Text]
      iii. Trochim (5) [Carmen]
      iv. Blalock, Jr., [Carmen]
      v. Sutton and Staw [Carmen]
      vi. Langbein [Carmen]
      vii. Weick [Carmen]
      viii. DiMaggio [Carmen]
      ix. Adcock and Collier [Carmen]
   b. In-class activities
      i. Course overview (week 1)
      ii. Assign presentations for week 2 (week 1)
      iii. Presentation and discussion of assigned readings (week 2)
      iv. Assign presentations (readings) for week 4 (week 2)

II. Week 3 (Jan. 28)... No class: use this time to start thinking about your research proposals (you will have a number of false starts before landing on a researchable topic that matters)

III. Week 4 (Feb. 4)... Experiments: random assignment logic and issues, different experimental designs, experimental designs in policy/management research, model specifications and structuring datasets for different experimental designs, analyzing experimental results
   a. Readings to complete before class
      i. Design and analysis
         1. Shadish et al., Chapters 8-10 [Text]
         2. Bickman and Rog, Chapters 1-4 [Text]
         3. Sherman [Carmen]
IV. Week 5 (Feb. 11)... Interrupted time series (ITS): implications of non-random assignment, simple ITS designs, advanced ITS designs, problems with ITS designs, model specifications and structuring data sets for ITS designs, analyzing ITS results
   a. Readings to complete before class
      i. Design and analysis
         1. Shadish et al., Chapter 6 [Text]
         2. Bickman and Rog, Chapter 6 [Text]
         3. Trochim (2) [Carmen]
      ii. Examples
         1. Greenbaum (2) [Carmen]
         2. Wu [Carmen]
         3. Mowery [Carmen]
         4. Ponomariov [Carmen]
   b. In-class activities
      i. Presentation and discussion of assigned readings
      ii. Interrupted time series in practice
         1. Prof. Greenbaum will discuss his study
         2. Prof. Boardman will discuss the Ponomariov study
      iii. Assign presentations (readings) for weeks 5 and 6

V. Week 6 (Feb. 18)... No class: use this time to start writing your research proposals (you can begin the problem statement, literature review, and framework/theory sections even if you have not landed on a design and data set yet)

VI. Weeks 7 and 8 (Feb. 25 and Mar. 4)... Research designs other than ITS that also lack random assignment: non-ITS designs that lack control groups, non-ITS designs that lack pre-test data, non-ITS designs that include control groups and pre-test data, non-experimental designs using cross sectional data, model specifications and structuring data sets for these designs, analyzing the results
   a. Readings to complete before class
i. Design and analysis
   1. Shadish et al., Chapters 4 and 5 [Text]
   2. Langbein (2) [Carmen]

ii. Examples
   1. Hassan (2) [Carmen]
   2. Moulton [Carmen]
   3. Boardman [Carmen]

b. In-class activities
   i. Presentation and discussion of assigned readings
   ii. Other quasi-experiments, pre-experiments, and non-experiments in practice
      1. Prof. Hassan will discuss his studies (week 7)
      2. Prof. Moulton will discuss her study (week 8)
      3. Professor Boardman will discuss his study (week 8)
   iii. Assign presentations (readings) for week 9 (week 8)

VII. Week 9 (Mar. 11)… Regression-discontinuity (RD) design: the basic RD design and its similarity to randomized experiments, variations of the design, model specifications and structuring data sets for these designs, analyzing the results
   a. Readings to complete before class
      i. Design and analysis
         1. Shadish et al., Chapter 7 [Text]
         2. Lee and Lemieux [Carmen]
      ii. Application
         1. Lavertu [Carmen]
   b. In-class activities
      i. Presentation and discussion of assigned readings
      ii. Regression-discontinuity in practice
         1. Prof. Lavertu will discuss his study
      iii. Assign presentations (readings) for week 12

VIII. Week 10 (Mar. 18)… No class (Spring Break): use this time to read for week 12 (there are a lot of readings that week), review content for weeks 1-9, and finalize your idea for (and begin writing) your research proposal

IX. Week 11 (Apr. 1)... Case studies and mixed-methods research: the ideal case study design, purposive sampling, triangulation, complementary use of quantitative and qualitative data, pattern-matching for qualitative data, analyzing case results
   a. Readings to complete before class
      i. Design and analysis
         1. Yin, all chapters [Text]
         2. Eisenhardt [Carmen]
         3. Flyvbjerg [Carmen]
         4. Bickman and Rog, Chapters 7-11 [Text]
5. Miles and Huberman [Carmen]
6. Strauss and Corbin [Carmen]

ii. Examples
1. Girth [Carmen]
2. Boardman [Carmen]
3. Lowery and Lyons [Carmen]

iii. In-class activities
1. Presentation and discussion of assigned readings
2. Case study in practice
   a. Prof. Girth will discuss her study
   b. Prof. Boardman will discuss his study
   c. You will reverse-engineer the Lowery and Lyons study
3. Assign presentations (readings) for week 13 (you must also describe example studies for the chapter you are assigned to present)

X. **Week 12 (Mar. 25)**... **Data collection, more issues to consider in applied social science research:** “The Government is very keen on amassing statistics—they collect them, add them, raise them to the nth power, take the cube root and prepare wonderful diagrams. But what you must never forget is that every one of the figures comes in the first instance from the... (village watchman), who just puts down what he damn pleases.” (Stamp, Sir Josiah (1929) Some Economic Factors in Everyday Life. London: P.S. King and Son)

   a. Readings to complete before class
      i. Data collection
         1. Bickman and Rog, Chapters 12-18 [Text]
      ii. More issues to consider in applied social science research
         1. Shadish et al., Chapter 5, Appendix 5.1 and Chapters 11-14 (propensity scores and hidden bias, selection bias modeling, and latent variable SEM) [Text]
         2. Grossman and Tierney (problems with comparison groups) [Carmen]
         3. Mahoney (causal inference for small N research) [Carmen]
         4. Heckman and Smith (experiments v. non-experiments) [Carmen]
   b. In-class activities
      i. Presentation and discussion of assigned readings
      ii. Assign presenter and discussant roles (research proposals) for weeks 14 and 15
      iii. Discussion and review of content from weeks 1-12 as necessary

XI. **Week 13 (Apr. 15)**... **Research proposal presentations and discussion:** Those who do not present will act as discussant. Presentations must be 20 minutes long. Discussants must respond (constructively) for 10 minutes.

XII. **Week 14 (Apr. 22)**... **Exam:** The exam will be emailed to you at 8:30 AM and you will have until 5 PM to complete the exam. You must submit your exam to the Carmen drop box as
well as email it to the instructor (boardman.10).

XIII. **Finals period (May 1)... Research prospectus**: This is due Friday May 1 at noon to the Carmen drop box as well as via email (boardman.10).