The object of this course is to help those who are planning to undertake an empirical inquiry, such as a doctoral dissertation, to meet the principal challenges of doing empirical research in the social sciences. The focus is on research design: how to plan a piece of research that will generate important and convincing results and how to present it effectively. The course covers the main issues in research design associated with case selection, concept formation, measurement and the uses of large-n statistical analysis relative to small-n case studies. For many such topics, clear-cut principles of good practice can be identified. Since all research designs entail trade-offs, the other objective of the course is to cultivate a more general appreciation for the nature and limits of the research enterprise itself in order to inform the decisions that must be made about any individual piece of research. For this reason, we also look briefly at general issues in social science rooted in the interdependence of theory and data, the problem of establishing causality, and the dilemmas generated by complex causal structures. The course covers large-n and small-n analysis, considering the leverage each offers, often in the context of practical examples. For lack of time, it does not cover many ancillary issues in quantitative and qualitative research, ranging from how to make statistical studies or survey analyses more robust to how to conduct interviews and experiments, utilize content analysis, or pursue archival research.

The course is suitable for all doctoral students in Government regardless of year including students in the second-year and above developing dissertation topics or working on dissertations. Advanced undergraduates or graduate students in other fields will be admitted with the permission of the instructor if space allows. Auditors are welcome if space allows but must do all the work for the course and participate in discussion.

Requirements

1. Since the class proceeds largely by discussion, all participants are expected to do the required reading carefully and to join in active discussion. This counts for the grade. Background reading is optional and provides further reading about specific topics for use when doing research.
2. The written requirement for the course entails developing a proposal for a specific piece of research. On September 24, all participants turn in a 2 page proposal for such a piece of research, which can be a planned dissertation topic or any other major research project (however hypothetical) that involves some primary empirical research.
3. On October 16th, participants turn in a grant proposal of 2000-2500 words based on their initial proposal or a new project. This should be written as if it were an application for funding.
4. On December 1st, participants circulate a 1½ to 3 page evaluation couched as a review for a journal of one of the unpublished papers to be distributed on November 19th.
5. On or before December 15th, participants hand in a 4500 word revision of their proposal couched as a dissertation or research prospectus.
Readings and Course Outline

1. (Sept 3) The Evolution of the Discipline

This session will introduce the course and review the development of the discipline of political science.

Background Reading


PART ONE: SOCIAL SCIENCE AS DISCOVERY AND EXPLANATION

2. (Sept 10) The Research Enterprise: Mainstream and Competing Views

"Truth proceeds more readily from error than from confusion"

-- Francis Bacon

This week we consider how to choose a research topic and mainstream views about how to go about explaining political phenomena. What should one look for in a research topic? KKV offer some suggestions but you may have other ideas to bring to the table. Try to identify some studies you admire and be prepared to indicate why. Although focused on the ‘comparative method’, Lijphart’s classic article outlines an influential view about what different kinds of studies of studies can accomplish. What are the advantages and disadvantages of experimental, statistical and small-n comparative analyses? What can we use each to do? McKeown takes up such issues via critiques of KKV’s approach to research design. What points are at the core of their critiques? Where do they seem valid or misplaced? What would their injunctions suggest we might do differently? Finally, Taylor’s classic essay suggests, following Weber, Geertz and others, that social explanation must comprehend the meanings actors assign to the actions and the systems that produce those meanings. Should we take this into account and if so how can we?

Required Reading


3. (Sept 17) What Should We Be Looking For? Concepts of Explanation and Causality

"The idea of causality is allowed to survive because, like the British Monarchy, one supposes it to do no harm."

-- Bertrand Russell

Since social science is predominantly an explanatory enterprise that seeks the causes that lie behind economic, social or political outcomes, this week we consider the issues of how we should construe ‘causes’ in the social world and how best to identify them. Holland’s classic exposition of Rubin’s approach to causality lies behind KKV’s influential formulation of what social scientists should be doing. What are the distinctive features of this approach to causality? What are the limits of this approach? Mahoney and Goertz contrast quantitative and qualitative research, suggesting, among other things, that they take different approaches to the problem of establishing causes. What are these differences? Do you agree? Can small-n research illuminate the search for ‘probabilistic’ causes, as opposed only to ‘necessary’ and ‘sufficient’ causes? The article by Gross reflects a growing literature that suggests that what it means to identify the cause of a phenomena is to identify the causal mechanisms that underlie it. Why does he lean to identifying causal mechanisms? What are causal mechanisms? How might causal mechanisms be construed? Read the article by Culpepper as an effort to identify the causes of a phenomenon. What does he set out to do? How does he do it? What are the advantages and limitations of his approach?

Required Reading


**Background Reading**


Margaret Archer et al., *Critical Realism*. (London: Routledge, 1998)


**4. (Sept 24) The Relationship between Theory and the Empirical World**

"I have cleansed the Augean stables only to replace it with this cart of dung"

-- Johannes Kepler on finding his laws of planetary motion did not conform to geometrical form

This week, we explore the dilemmas associated with testing theories against empirical evidence, reading Kuhn’s influential critique of positivist positions. On what grounds does he challenge the positivist view that empirical evidence can be used to falsify theoretical propositions? How then does ‘science’ progress? Where do theories come from? What leads to paradigm shift? The difficult but important essay by Lakatos is an influential effort to resolve problems of the sort Kuhn identifies. In his view, how does science progress? How might a ‘three-cornered fight’ help resolve the problems that arise from the interdependence of theory and data? Moravcsik applies Lakatos’s views to the problem of understanding progress in the study of international
relations, focusing on liberal international relations theory. Does it make sense to understand progress in political science in Lakatosian terms? What are the problems in doing so?

**Required Reading**


**Background Reading**


**PART TWO: THE ADVANTAGES AND DISADVANTAGES OF ALTERNATIVE RESEARCH DESIGNS**

5. (Oct 1) The Promise and Pitfalls of Statistical Approaches and Large N Analysis

"Without a constant counterfeiting of the world by means of numbers, mankind could not survive"

-- Friedrich Nietzsche

This week we examine the advantages of using statistical techniques for establishing causal relations. The essay by Hall and Franzese provides one example that is then critiqued by Shalev. What is the essence of his critique? How valid is it? If it has merit, what should we do to improve our analyses? In what respects does the analysis of Hall and Franzese remain convincing? Wallerstein provides a brief discussion of the assumptions that must be made about the structure of causal relations in the world if standard forms of regression analysis are to produce valid results. In what instances, are those assumptions most likely to be satisfied? Sekhon reviews recent efforts to ‘recover the counterfactual’ using matching techniques among others. What is the value in using such techniques? What are their limits?
**Required Reading**


Michael Shalev, “Limits and Alternatives to Multiple Regression in Comparative Research,” *Comparative Social Research* 25 (Spring 2006).


**Background Reading**


"Every simple statement is false. Every complex statement is useless"

-Paul Valéry

This week we consider the advantages and disadvantages of small-n research designs with an emphasis on those that employ some form of process analysis. On what basis does Hall criticize conventional approaches to small-n comparison based on the comparative method as described by Lijphart in the essay we read in week 2? Why might systematic process analysis be a better alternative? What are its limits? When might you use process analysis and when might you use other approaches to establishing causal explanations? The article by Owen summarizes a book that can be taken as an example of process analysis, used, in this case, to explain why democratic states are unlikely to go to war with one another. What aspects of his analysis do you find valuable? Where does it fall short? Bennett and George discuss other ways in which case studies might be used, notably to construct typologies of causes and outcomes. Do you see value in their approach? When might one want to use a large-n analysis and when a small-n analysis?

**Required Reading**
Peter A. Hall, "Aligning Ontology and Methodology in Comparative Research " in James Mahoney and Dietrich Rueschemeyer, eds., Comparative Historical Research (NY: Cambridge University Press 2003).


Background Reading


“Fallacies of Narration” and “Fallacies of False Analogy,” in Fischer, Historian’s Fallacies, pp. 131-163.


Harry Eckstein, "Case-Study and Theory in Political Science " in Fred Greenstein and Nelson Polsby, eds., Handbook of Political Science Vol. 7 (Reading: Addison-Welsey 1975), pp. 79-139.


7. (Oct 15) Small-N Analysis in Action

This week we read a well-known work initially based on a doctoral dissertation, that uses small-N comparison, with a view to evaluating the techniques Skocpol uses to establish her points and to considering the issues that small-N comparison raise. Mahoney argues that Skocpol uses multiple methods. Does she? Should we view this as a form of process analysis? What aspects of her analysis do you find most convincing, least convincing, and why? This is also an opportunity to consider how a scholar designs her research and how she presents it. Try to read the book from the perspective of its author. What were the principal analytic challenges this project raised for the author and how did she cope with them? What would you describe as the main features of how she presents her research? What does she do, for instance, in the Introduction and in what order? How are the chapters organized? How does she handle the problem of presenting a comprehensible narrative while also interrogating the evidence? What aspects of the presentation do you find effective? Which ones do you think might better have been done differently? Finally, this is an opportunity to ponder Sewell’s influential essay arguing for ‘eventful’ explanations of social outcomes. How would you contrast his approach to that of Skocpol?
Where do you find his critique convincing or unconvincing? What are its implications for our research designs?

**Required Reading**


**Background Reading**


Charles Ragin, 'Turning the Tables.' *Comparative Social Research* 16 (1997)


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**PART THREE: DESIGNING AND CONDUCTING EFFECTIVE RESEARCH**

8. (Oct 22) Issues in Concept Formation and Measurement

*Note: This class will be rescheduled as a result of a scheduling conflict.*
"With eyes-to-see and lips to kiss with, who cares if some one-eyed sonofabitch invents an instrument to measure spring with"  
-- e.e. cummings

This week we consider the problem of devising good concepts, and measures for use in empirical inquiry. The excerpts from KKV and the article by Collier and Adcock provide good surveys of the main issues associated with measurement and concept formation. What does the formation of effective concepts require? What are the challenges of securing effective measures and how can they be addressed? From your general reading, come with examples of good/bad theories, concepts and measures. The articles by Putnam provide concrete examples of research in which these issues can be examined. They should be read carefully and critically with attention to the adequacy of the concepts at the core of the articles and the measures used to assess them. However, we should ask, as we have of other works, what decisions did the author make about designing and presenting the research? How does he choose to present the core issues? What general techniques does he use to substantiate his conclusions?

**Required Reading**


**Background Reading**


9. (Oct 29) Writing an Effective Grant Proposal

“I checked it very thoroughly,” said the computer, “and that quite definitely is the answer. I think the problem, to be quite honest with you, is that you’ve never actually known what the question is.”

Douglas Adams, The Hitchhiker’s Guide to the Galaxy

This week we will consider techniques for writing a good grant proposal. These are also applicable to the problem of writing a good dissertation prospectus. To do so, the class will convene as a ‘granting committee’ to assess a set of proposals and select those to recommend for funding. A set of proposals, some of them written by members of the class, others by other scholars, will be distributed on October 22nd. Participants should submit scores based on their initial judgment of these proposals (on a scale of 1 to 5 with 5 the highest and 1 lowest ranking) by email to Peter Hall by 2 pm on October 28th. We will conduct the class as a discussion of which proposals to fund.

Required Reading

The grant proposals distributed on October 22nd.

10. (Nov 5) Principles of Case Selection

This week we review the main precepts developed to guide and justify case-selection in large-n and small-n research projects. Although good general principles are evident here, there is also some controversy about best practice in this matter. Review the guidelines for choosing cases and making observations presented in these useful sections in the work by KKV. What are the most important of their recommendations? What is the core rationale for each of them? Why do KKV advance these particular principles? Seawright and Gerring provide guidance focused more directly on small-n research designs. How should one choose one’s cases when looking in depth at one or a small number of cases? There is some variation here in how ‘cases’ and ‘observations’ are defined. You may find it useful to adopt my principle of defining a case as a unit of analysis that takes one value on the dependent variable of interest and in which multiple observations can be made. Many studies now utilize mixed methods, often characterized by a combination of large-n and small-n analysis. In many instances, small-n analysis is used to develop a new theory and large-n analysis used to test it. However, Lieberman proposes reversing that order and using large-n analysis to select the cases to be examined in more detail. When that approach is used, what are the main principles on which cases are selected for study? What are the advantages and disadvantages of using this approach to case selection? Finally, the brief excerpt by Kidder outlines some of the threats to validity that any particular selection of cases might confront. What are these threats and how does one avoid each of them?

Required Reading


**Background Reading**


11. (Nov 12) What Kind of Theories Should We Be Looking For?

“Never let an ugly fact get in the way of a beautiful theory”

Political science progresses not only by testing for the presence of particular causal relations among variables but also by developing new theoretical perspectives that offer portraits of the political world. Therefore, we need to ask: how does one design research that will make important theoretical, as well as empirical, contributions to the discipline? Similarly, when assessing whether a set of empirical results confirms or disconfirms a theory, given the susceptibility of such results to errors of measurement or specification, as Lakatos suggests, a fine judgment often has to be made about whether to reject the relevant theory or the relevant results. For that purpose, we need criteria by which to judge, not only our empirics, but also our theories. What makes for a good theory? Unfortunately, the literature provides little guidance on this matter. KKV and Waltz provide useful brief discussions. Here are some issues we should discuss. What distinguishes a theory from a hypothesis? Where does one secure a theory? How should one present it in a book or article? Friedman’s famous essay addresses the issue of how to judge a theory. He argues that theories should be judged on their predictive power rather than the accuracy of their assumptions. Do you agree or disagree and why? Finally, Ian Shapiro expresses skepticism about theory-driven research, arguing instead for problem-oriented research. What would the latter entail and why, or why not, pursue it?

**Required Reading**


**Background Reading**


12. (Nov 19) Coping with Causal Complexity across Space and Time

"...Nature is pleased with simplicity and affects not the pomp of superfluous causes"

-- Isaac Newton

Much of political science is focused on finding causal effects that hold consistently across space and time. Indeed, some define the research enterprise as a search for such effects. However, there are some important respects in which the world changes over time and some persistent differences across countries. Some suggest that many important outcomes are deeply conditioned by the context of the relevant events in time or space, in effect, the result of interaction effects among causal variables rarely specified in analyses that assume unit homogeneity. When should we build such factors into our analyses and how should we do so? This is an issue area as yet barely treated by the literature. It arises in discussions of path dependence and analyses of institutional change. What kind of methods should we use for testing theories about phenomena that feature these causal structures? What can we do in our research designs to accommodate such possibilities? Abbott identifies a number of phenomena that escape standard linear analyses, and Pierson identifies another set of causal processes that require careful modeling. Which of the phenomena they mention seem most important and where might
they appear in politics? Bennett and Elman consider the problem of path dependence. How might it be defined? How can we design research that gets effectively at such processes? Ragin is attentive to multiple conjunctural causation, sometimes termed ‘equifinality’. How adequate are his methods for coping with it and, more important, with other kinds of causal complexity? Do they require altogether different analyses?

**Required Reading**


**Background Reading**


**13. (Dec 3) Writing and Publishing a Good Article**

*Note: This class will be rescheduled as a result of a scheduling conflict.*

This week we will consider the practicalities of presenting one's research effectively in article form. We will read a published article and two papers by students, if possible written by members of the class for another course or purpose. The student papers will be distributed on Nov. 20th and members of the class will be asked to provide a 1 ½ to 3 page review of one of them, equivalent to the review one provides when asked to evaluate a paper submitted to a major
journal in the field, including a recommendation to publish, revise and resubmit, or reject. These review are to be anonymous and should contain nothing to identify the author. They should be sent to Peter Hall by 2 pm on Nov 30th. Everyone should read most of the reviews as well as both student papers.

We will devote the first half of the class to discussing the elements of good presentation using the published article as a guide and the second half to discussion of the student papers. Everyone should read all the papers carefully, analyze what each author does in each paragraph of the paper, and come prepared with answers to the following questions. What are the key tasks a good paper should accomplish? Putting oneself in the authors’ shoes, what are the major presentational challenges facing them as they began to write each article? How does the author frame the problem in it? How does he interest the reader in its content? What is the order in which the key elements of the article are presented? How is the empirical material presented relative to the presentation of the theory? What does the conclusion do? Are there any ways in which the presentation could have been more effective? What do you find least convincing about the article and what could have been done about that? We will discuss how to write an effective evaluation and then discuss how the authors of the student papers might improve the presentation of their arguments and findings.

**Required Reading**

Two student papers to be circulated on Nov 20th.


**Background Reading**


