Good research often begins either with an intense but focused curiosity about why some event has happened or with a sense of sputtering indignation at the patent idiocy of some particular argument advanced in the literature. Potential researchers who feel little curiosity or indignation in response to the social world and the arguments published about it should consider the possibility that they have chosen the wrong job.

Barbara Geddes

Course Description: This course is an introduction to research design and data analysis in political science. It focuses on concrete issues of conducting research: picking a researchable question, generating hypotheses, choosing cases, measuring variables, constructing experiments, working with data sets, conducting archival research and content analysis, developing surveys, and combining quantitative and qualitative methods.

Required Texts:


* Many of the required readings on the syllabus and all course documents are available on Blackboard (http://blackboard.wm.edu). See readings marked (BB).

Course Requirements: You are expected to attend every class, complete the readings before the class for which they were assigned, and participate in in-class discussions. Instructions for course assignments are appended to the syllabus and posted on Blackboard. **No student can pass the course without completing all assignments.**

Grading: Your participation in in-class discussions and performance on class assignments will determine your final grade. They are weighted as follows:

- Participation: 10%
- Midterm exam: 25%
- Statistics exercise: 15%
- Preliminary bibliography: 5%
- Literature review (8-10 pages): 20%
- Final research prospectus (18-20 pages): 25%
Numeric grades translate into letter grades in the following manner:

- 100-94: A
- 93-90: A-
- 89-87: B+
- 86-84: B
- 83-80: B-, etc.

Late Assignments: Failure to hand in an assignment at the scheduled time will result in a zero for that assignment. Receiving an extension because of an absence requires notice from the Health Center or the Dean of Students. Late assignments will be penalized 2/3 of a letter grade for each day they are late (i.e., the grade for a literature review that is one day late will be lowered, for example, from an A- to a B).

Academic Honesty: You are expected to adhere to the tenets of the Honor Code when completing course assignments; they will be strictly enforced. If you are uncertain about what constitutes plagiarism (e.g., the rules for properly attributing cited material or how to paraphrase), please ask for clarification before handing in assignments.
Part I: Building Blocks of Political Science Research

January 19: Introduction

January 21: Positivist approaches to knowledge

Readings:

January 24: No class

January 26: Alternative approaches to knowledge

Readings:

January 28: Asking good research questions

Reading:

January 31 and February 2: Concepts, hypotheses, and theories

Reading:
* Johnson and Reynolds, *Political Science Research Methods*, 65-86.

Assignment:
* Bring to class a work of political science scholarship that makes an argument you find particularly compelling.

February 4: The literature review

Reading:
* Johnson and Reynolds, *Political Science Research Methods*, ch. 6.

Read one:
Assignment: * Submit a short paragraph describing a research question in political science that interests you. Research question is due 2/4.

Part II: The Practice of Research

February 7, 9, and 11: Measurement and measurement error

Reading: * Johnson and Reynolds, Political Science Research Methods, ch. 4.


February 14 and 16: Experimental research designs

Readings: * Johnson and Reynolds, Political Science Research Methods, pp. 122-147.

Assignment: * Submit two to three paragraphs describing your revised research question, clearly identifying your dependent and independent variables. Also include a list of the twenty most relevant scholarly articles or books you have found on your topic. These will form the basis of your literature review. As Roger Ebert once commented, “[d]oing research on the Web is like using a library assembled piecemeal by pack rats and vandalized nightly.” Thus, use all of the following search engines to locate sources: Social Science Citation Index, Infotrac, Lexis-Nexis Academic, PAIS, Ingenta, Project Muse, JSTOR, Lion, and lastly Google. Preliminary bibliography and the short essay are due 2/16.

February 18 and 21: Non-experimental research designs: strategies for case selection

Readings: * Johnson and Reynolds, Political Science Research Methods, pp. 147-165.

February 23: Avoiding the pitfalls: selection bias


February 25 and 28: Data collection techniques: process tracing and structured, focused comparison

* Amy Oakes, “Introduction” and “A Diversionary War: Argentina’s Invasion of the British Falkland Islands, 1982.” (BB)

March 2: Data collection techniques: observation

**Readings:**
* Johnson and Reynolds, *Political Science Research Methods*, ch. 8

March 4: Midterm exam

March 5-13: Spring break (no classes)

March 14 and 16: Data collection techniques: content analysis

**Readings:**
* Johnson and Reynolds, *Political Science Research Methods*, ch. 9.

March 18 and 21: Data collection techniques: survey research and sampling

**Readings:**

**Assignment:**
* Submit an 8-10 page literature review, which discusses the existing research related to your question. The literature review is due 3/21.

**Part III: An Introduction to Statistical Analysis**

March 23: Frequency distributions

**Readings:**

March 25: Computer lab I

March 28: Central tendency and dispersion

**Readings:**
* Johnson and Reynolds, *Political Science Research Methods*, pp. 360-393.
March 30: Statistical inference


April 1: No class (annual meeting of the Midwest Political Science Association)

April 4: Computer lab II

April 6, 8, and 11: Measures of association and tests of significance


April 13: Computer lab III

April 15, 18, and 20: Correlation and linear regression


April 22: Computer lab IV

April 25 and 27: Mixed-method research designs

* Matthew Kroenig, *Exporting the Bomb: Technology Transfer and the Spread of Nuclear Weapons* (Cornell University Press, 2010), excerpts. (BB)

April 29: Prospectus workshop


Final Research Prospectus: Due Wednesday, May 11 at 5:00 p.m. No electronic copies accepted.

* COURSE SCHEDULE IS SUBJECT TO CHANGE AT THE DISCRETION OF THE INSTRUCTOR*
GUIDELINES FOR THE LITERATURE REVIEW

Assignment

Submit an 8-10 page literature review, which discusses the existing research related to your question. An effective literature review accomplishes two goals: (1) it summarizes and evaluates the state of knowledge on a particular subject; and (2) it situates the proposed project in relation to the existing research and highlights its value added. In sum, your literature review will provide an overview of the scholarship most pertinent to your research interests and explain how the proposed research will add to or alter the existing body of knowledge.

A successful literature review will:

1. Present an argument about the state of knowledge on a subject. It is not merely a series of article and book summaries.

2. Be selective. It will only discuss those articles/books (or parts of articles/books) that help you demonstrate how your research will make a contribution to the literature. It will be a very focused setting of the scene for your project.

3. Be structured in a way that makes sense given the kind of contribution you think your project is making. Think carefully about the order in which you will discuss existing research on your topic—so that it will be clear to the reader by the end of the review how/why your project is important and original.

Remember that there are many ways to contribute to scholarship:

1. Test a hypothesis seen as important by scholars but which no one has studied systematically.

2. Find a topic everyone has overlooked and offer an explanation for it.

3. Find two competing explanations (e.g., they predict the opposite outcomes under the same conditions or they pose different explanations for the same outcome) and try to find out which one is correct.

4. Find two apparently competing explanations and argue that they are both true—that they can be combined to produce a better explanation of some phenomenon.

5. Find an explanation from another field or subfield and apply it to a new, apparently unconnected problem.

6. Find an existing explanation and show that it does not apply to a group of cases. Offer a new better explanation (or revise the old explanation).

7. Replicate another scholar’s research project—but apply his/her theory or explanation to a new case or set of cases (or a new dataset).

8. And there are many others…

Due Date

Due in class on March 21. No electronic copies will be accepted.
GUIDELINES FOR THE RESEARCH PROSPECTUS

Assignment

Complete a research prospectus of between 18 to 20 double-spaced pages (1-1.5 inch margins; 12 point font) not including the bibliography. This includes the 8-10 page literature review, which you have already submitted. Your final prospectus should do the following:

1. Specify a research question and identify your dependent variable (and any independent variables) and the unit of analysis.

2. Answer the “so-what” question—explain why the question is important, policy relevant, etc.

3. Clearly establish the nature of your contribution to the scholarly study of politics (e.g., demonstrating that two apparently competing arguments are complementary; finding a topic everyone has overlooked and offering an explanation for it, etc.).

4. Include a revised literature review, which incorporates any new literature relevant to your question you have discovered and/or any changes in your understanding of the nature of your contribution to existing research.

5. Make it clear whether the goal of your research is to make causal claims (i.e., it is a “confirmatory” study) or to generate new theory and/or to establish the plausibility of an argument (i.e., it is an “exploratory” study).

6. If the aim of your study is to make causal claims or conduct a pilot test—that is, your contribution is to test or demonstrate the plausibility of your own theory or to evaluate other scholars’ deductive theories—describe these theories or hypotheses and their observable implications (i.e., if the argument are correct, what should you observe in the real world?). If your study will engage in process tracing to test your own or another scholar’s proposed causal mechanism, discuss that causal mechanism and its observable implications. However, if the aim of your study is to generate a new explanation for an understudied phenomenon, indicate that (note that your literature review should have established that there is no existing theory which you can test, thereby necessitating an inductive study).

7. Identify and define each of the concepts discussed in the theories or hypotheses you intend to examine. Remember that your definitions should build on definitions in the extant literature. If you are conducting an inductive study, you should conceptualize your dependent variable.

8. Select and defend your choice of measurements for the variables in your study, making certain to address possible sources of measurement error. Discuss why your measures are valid and likely to be reliable. Discuss the level of measurement you will employ and why.

9. Specify and describe the method of inquiry you will use in your study. Explain why you chose an experimental or non-experimental (large- or small-N) design. Describe and explain your choice of data collection techniques. In other words, if you plan to conduct an experiment, explain why and discuss its design. If you plan to conduct a large-N analysis, explain why and discuss its design, including the origins and construction of the datasets will you use and likely method of analysis (e.g., if you plan to conduct a survey, explain why and discuss its design, including the specific survey instrument you will administer and your sampling procedures). If you plan to conduct one or more case studies, explain why and justify your choice of cases. Explain how you will collect your data, etc. Note that you can also combine methods. If you choose to do so, explain why and describe your design.

10. Discuss the major limitations of your research design (what objections might a skeptical reader raise?) and, when you can, briefly address them.
11. Conclude with a discussion of what you hope to find when you complete your research and what you believe you will add to our knowledge of politics. Treat this as your final chance to make the case for why your study is original and represents a scholarly contribution.

In the end, a successful research design will not only accomplish each of these tasks and produce a plan of research that will enable you to make the contribution you propose, but it will also be feasible (i.e., you could complete the research in the course of a semester and discuss the results in a journal article length paper—about 45 pages).

Write with clarity: be concise and avoid jargon. Pay particular attention to organization. The paper should be organized logically, so that ideas and arguments flow from one to the next. I recommend including a roadmap for the rest of the paper at the end of the introduction. I also suggest using headings and sub-headings to help your reader see the structure of your argument. Proofread for misspellings, grammatical errors, awkward sentences, and so on. Remember that an excellent paper is usually the product of several redrafts. Even the most skilled writers need to polish their prose.

You must cite any information or ideas that you borrow from someone else’s work (when in doubt, cite). Any social science citation style is acceptable as long as it is used correctly and consistently. Include a complete bibliography at the end of the paper. You will be able to find a number of guides in the reference section of the library, which describe how to correctly format footnotes and the bibliography. If you have any questions about whether or how to properly cite material, please ask me for guidance.

Due date

Prospectus is due on May 11 at 5:00 p.m. at my office (Morton 25). No electronic copies will be accepted.