PSC 511: Research Design  
Spring 2011

Instructor:  Nathan Kelly  
Location:  HSS 107  
Time:  Thursday: 5:05-7:45  

Introduction and Learning Objectives

This course provides an introduction to research design for students of political science. The course is targeted toward students who wish to pursue an academic career of research and teaching in political science. The main learning objective of the course is for students to develop an understanding of research design sufficient to critique the research of others and to develop one’s own research project. In this class, students learn how to pose focused research questions, develop answers with theoretical frameworks, formulate and refine concepts, construct valid and reliable measures, and finally to gather data. While other methodology courses teach students how to analyze data, this class emphasizes the preliminary process of asking questions and gathering high quality data.

Course Structure and Requirements

This is a seminar and thus has expectations in line with such a course structure. Attendance is mandatory, full preparation before coming to class, and active participation by EVERYONE is expected. We will have discussions about the readings, and all of us will learn from each other by exploring ideas verbally and by bouncing ideas off of one another. The main assignment in this course is a research design of your own that could serve the basis of a publishable research project. Throughout the course there will be several assignments related to this research design, including regular presentations to your classmates regarding your progress. This will act as an accountability measure, but should also be fun.

Required Texts. Available in the college bookstore or online:


Assignments:

Discussion Participation. Attendance and participation are mandatory for this course. Learning is an active exercise so you must come prepared to discuss the course material each week. At the VERY MINIMUM you should come prepared to answer the following questions for each of the assigned readings:

1. What are the major themes?
2. What questions of clarification do you have?
3. What criticisms do you have of the arguments in the readings?
4. What does the reading contribute to your understanding of research design?

Please also come prepared to discuss these questions, in addition to any others that you find relevant.

An additional part of your discussion participation grade will be determined by the quality of oral presentations on the components of the research process. The last 30-60 minutes of each period will be allocated to a discussion of your progress on your research design and its components. Come each week prepared to discuss what progress you have made on your research question, hypothesis, operationalized hypothesis, literature review, and the research design as a whole. Don’t embarrass yourself by not having made any progress on your work. Come prepared to discuss what you have done.

Discussion Leading. Each week two students will have the responsibility for leading a discussion of the readings for the week. The instructor will also help facilitate the discussion each week, but students will have the primary responsibility. Each student will do this twice during the semester. We will decide who will be responsible for each week’s discussion during our first session. In addition to actually leading the discussion, each discussion leader must develop a list of discussion questions based on the assigned readings (in addition to those that I provide in the course calendar). These discussion questions will help to provide a basis for the class discussion that should last about two hours. The discussion questions should be circulated to other members of the class 48 hours prior to the beginning of the meeting time for the week during which you will be leading discussion.

Research Design. One requirement of this course is that you develop your own research design. Ideally, this research design could serve as the basis for a dissertation proposal, publication, or conference presentation. Students are responsible for choosing a topic based on their own interests, and this topic must be addressed in a systematic (e.g., quantitative, qualitative, experimental, formal, comparative-historical, etc.) fashion. The research design will have five major parts: research question, hypothesis, literature review, measurement and data, and design plan. The first four of these sections will be due throughout the semester. These four pieces, synthesized into a coherent paper, with the final section (design plan) added, will be the final research design which is due on the last day of class. You may write no more than 15 pages (double-spaced, 12 pt Times New
Roman font, pages numbered, excluding bibliographic references). The difference between a research design and full-blown research paper is that one need not conduct the tests (statistical, case study, etc.) of hypotheses, but rather explains what will be done, what data must be gathered, and how the data will be gathered. Please note that if you are currently a student in the Quantitative Methods course, you could work on the same topic in both courses such that you would have a complete research paper at the end of the semester. (However, note that certain parts of your research design would need to be modified or excluded from something targeted at a professional conference or refereed journal. I or another professor in your area of interest will be happy to provide counsel on this if you go this route.)

Here are some quick tips and a brief description of each part of the project:

1. Begin by picking a topic that interests you. This may seem obvious, but the worst thing you can do is pick a topic because it seems easy. You will be working on this project all semester, so you might as well be interested in what you are doing. Plus, your level of interest will probably have a direct correlation with the quality of the work you do.

2. Literature Review: Once you have picked a topic, you want to start reading as much previous research on this topic as you can find. Start with general issues surrounding your topic and then move to more specific issues. Start with the most recent work and then work your way back in time. This will allow you to use citations in more recent work as a guide to the most important earlier research. You will need to review the relevant literature to provide a proper context for your study. What questions are left unanswered by previous research? Does earlier work do anything wrong? Where does your project fit into previous studies? What contribution to knowledge will your project make? EACH WEEK, ONCE YOUR TOPIC IS IDENTIFIED, I EXPECT YOU TO EMAIL ME WITH AN ANNOTATED BIBLIOGRAPHY THAT INCLUDES AT LEAST THREE READINGs RELEVANT TO YOUR TOPIC THAT YOU HAVE READ AND BRIEFLY SUMMARIZED IN THE ANNOTATED BIBLIOGRAPHY. This assignment will be incorporated into your participation and literature review grades.

Even at this point in your career, you can make a contribution to knowledge in your area of study. A thorough literature review will answer all of these questions and probably a few more. Importantly, A GOOD LITERATURE REVIEW IS NOT JUST RECOUNTING AND SUMMARIZING PREVIOUS WORK, BUT CRITICALLY ANALYZES IT IN THE CONTEST OF YOUR RESEARCH QUESTIONS AND ATTEMPTS TO INTEGRATE EARLIER WORK WITH YOUR PROPOSED STUDY. You must engage in an intellectual dialogue rather than providing a laundry list of previous work. Integrate previous academic scholarship into your argument.
3. **Research Question**: The research question may be the most important part of your project. Without a good research question, it is hard to produce good research. The best way to create a good research question is to start with a general topic or area of research that interests you and then read as much as you can related to the topic. I use the term “related” here in a broad sense. For example, my research brings a theory from American politics (the macro politics model) and a theory from comparative politics and sociology (power resources theory) together to examine the connection between macro political dynamics and income distribution in the United States. I started with a general interest in income inequality, read a bunch of research in economics regarding its causes, and found that political explanations were woefully lacking. I then became interested in the macro politics model and started thinking about how earlier research in this tradition could be applied to income inequality. Along the way, I was introduced to a whole new literature in comparative politics and political sociology regarding class dynamics and distributional outcomes that was related to the macro politics model but had never been applied in that context. I then developed my own hypotheses based on these two theories and tested them. This has all lead to a book manuscript, so you never know how far the research question you develop in this course might take you.

The following are a number of ways to think about research questions:

- **The Hook** – A bit of information that intrigues you. This piece of information may be counterintuitive, counter-factual, or something so obvious that you wonder why it has not been studied more.
- **An Angle** – You approach an old topic or debate from a fresh direction. You might do this by questioning an old approach’s methodology or by introducing new data or interdisciplinary material/theories into your study.
- **The Driver** – This is the unknown piece of a puzzle that you need and want to find. Your research is driven by this unknown piece until your find that piece or derive a solution.

Your research question may be one of these, a combination of them, or something entirely different by nature. Regardless, your research question will and must guide your research project.

4. **Hypothesis**: The hypotheses that you develop should be generated by the research question and should address issues that have not been addressed in the existing body of research. The hypotheses of your project are the specific predictions that your research will be designed to test. An understanding of the gaps in existing knowledge that exist will motivate good hypotheses. Thus, despite the fact that your literature review is not due until after the hypotheses, you need to be reading previous research on your topic well before the literature review is due. However, the hypotheses that you initially hand in can change as you read and learn more about your topic. The
hypothesis or hypotheses you hand in initially should be good, but you can change them as you go along.

5. **Measurement and Data**: In a research design, you do not actually carry out the study, but you must relate how you will do the research. Part of this is identifying the key concepts that are important in your study. How do you define your concepts and how do they relate to your research question and hypotheses? How do you propose to observe these concepts? Essentially, this part of the assignment asks you to operationalize your hypotheses. How will you define and measure the concepts that your hypotheses bring to mind? Are your measures valid and reliable?

6. **Design Plan**: Here is where you will outline exactly how you will carry out your research. Will you conduct an experiment, a survey, comparative case studies, or what? How will you conduct the research? What questions will you ask in a survey, how will the experiment be structured, where will you find the necessary information to conduct the case study? Of course other methods might be appropriate for you, but the bottom line is: exactly how will you move your research idea into the real world and actually get it done?

7. **Bibliography and Other Resources**: You will need to include a list of references in your final research design and any other components of the design that require it. Obviously, anything that requires a citation needs to be listed. You also need to identify what additional resources you would need to do your research. For example, if you want to understand the policymaking process related to the marriage penalty tax, you would likely want to travel to Washington to conduct interviews of policymakers. Or, if you want to study the ability of a president to influence Congressional roll-call voting behavior, you will need to access presidential libraries and the national archives. This needs to be clearly stated.

8. Due dates are listed in the class schedule. Please note that the final research design, while incorporating assignments due previously, should stand alone on its own and make sense. The most sensible organization of the final paper is probably: Introduction and framing of a Research Question; Literature Review, Theory, and Hypotheses; Basic Research Strategy, Data and Measurement; Strategy for Analysis (Design Details), Conclusion.

9. Remember that the methodology is a very important aspect of the research design. Do not think that you can be vague just because you are not actually conducting the research at this point in time. You must be very detailed and precise.

10. Grading of the research design will be based on the following:
The clarity of your thesis. Can a reader understand the basic premise of your paper at the outset? This is the introduction, and a good one will keep you focused.

* Are crucial concepts, terms, and variables defined?
* Is the paper convincing?
* Are your arguments well supported?
* Are any major arguments or counter-arguments overlooked?
* Are potential criticisms of your work addressed?
* Is the paper focused? Does it stay on topic and is all material relevant?
* Is the design feasible and appropriate? Will your proposed methodology get to the answer? Is the design and measurement internally and externally valid? Are tradeoffs sufficiently explained and acknowledged?
* Did you fall into any basic methodological traps?
* Sources: Does the paper use a sufficient number of sources and try to ward against bias? Use in text citations.
* References – You must cite at least fifteen non-internet sources. No encyclopedias. You should use academic journals and books primarily, with some high-quality newspapers appropriate in certain contexts. Our textbooks will not count toward the fifteen citations. Nor will citations to things the instructor or other students say during class.
* Presentation. Does the paper contain errors of grammar, usage, mechanics, word choice, spelling, citations, bibliography, etc.?
* Please read the paper before turning it in. I never cease to be amazed in my own work and the work of others that the first, second, and third drafts still seem to have a few typos or other errors. Read the thing through a few times so you can catch these. Perhaps have someone else read it over for you as well. We are often blind to our own errors.

**Oral Presentation.** You will present your research design to your colleagues on the final days of class. All the major aspects of the paper will be presented. I will conduct the presentations as if you were at a professional conference (though note that at a conference you should not be presenting just a design). Your presentation will be evaluated on most of the same criteria as the paper itself. You should prepare to speak for NO MORE THAN 15 MINUTES.

**Attendance at Departmental Research Presentations.** I expect all students to attend all departmental research presentations. This includes invited speakers, job candidates, and faculty and student presentations. If you are unable to attend a departmental presentation, please notify me in advance. Only responsibilities directly related to your research or teaching will be excusable absences. Students who fail to attend departmental presentations will suffer a reduction in their final course grade.
Grades. Grades will be computed as follows:

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<th>Component</th>
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<tr>
<td>Book Review Paper</td>
<td>15%</td>
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<tr>
<td>Research Question, Hypotheses, Measurement and Data, Literature Review</td>
<td>15%</td>
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<td>Discussion Leading and Participation</td>
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<tr>
<td>Oral Presentation</td>
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<tr>
<td>Research Design</td>
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Policies

Late Assignments. Except under unusual circumstances, assignment grades will be reduced by 10% for each 24-hour period that they are not handed in. For example, an assignment due on Tuesday at 11:15 will be penalized 10% if handed in by 11:15 Wednesday, 20% if handed in by 11:15 Thursday, and so on. It is very unprofessional and is considered bad form to turn in assignments late in graduate courses, so get things done on time!

Attendance. I expect you to attend every class session. If you must miss class for some reason, you can receive an excused absence if you contact the instructor in advance. To be absolutely clear – I do not expect to provide any excused absences except in the most exceptional of circumstances. Your grade will suffer for absences, so be forewarned.

Academic Integrity. Academic integrity is a serious issue and will be treated as such in this course. Cheating of any kind will not be tolerated, including plagiarism. Plagiarism is using the intellectual property of someone else without giving proper credit. The undocumented use of someone else’s words or ideas in any medium of communication (unless such information is recognized as common knowledge) is a serious offense, subject to disciplinary action that may include failure in the course and/or dismissal from the university. Specific examples of plagiarism include:

- copying without proper documentation (quotation marks and a citation) written or spoken words, phrases, or sentences from any source.
- summarizing without proper documentation (usually a citation) ideas from another source (unless such information is recognized as common knowledge).
- borrowing facts, statistics, graphs, pictorial representations, or phrases without acknowledging the source (unless such information is recognized as common knowledge).
- collaborating on a graded assignment without instructor’s approval.
• submitting work, either in whole or part, created by a professional service and used without attribution (e.g., paper, speech, bibliography, or photograph).

As a student in this course you agree to abide by the following honor statement of the university:

I pledge that I will neither knowingly give nor receive any inappropriate assistance in academic work, thus affirming my own personal commitment to honor and integrity.

Any violations of this honor statement will be dealt with to the fullest extent authorized under department and university policy.

Students with disabilities. Students with disabilities should feel welcome in this course. If you have a disability and believe you will need any special accommodations, please contact the Office of Disability Services immediately (974-6087). Information is also available on the web at http://ods.utk.edu/. ODS will be able to provide you with the help you need and will provide you with documentation regarding what accommodations I need to make as a professor.

Blackboard/Online@UT. I will often use blackboard to distribute assignments, lecture notes, and other communications. It is very important that you check the blackboard site regularly, as announcements will be posted there (e.g., cancellations and due date changes). Also, I will communicate with you occasionally via email. If you do not access your UT email account regularly, please be sure to set up forwarding. If you have questions about this, please contact the OIT help desk.

Changes to Syllabus/Schedule. I reserve the right to make reasonable modifications to this syllabus, including the scheduling of exams and assignments, with appropriate notification in advance to students.
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<th>Date</th>
<th>Readings/Assignments</th>
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<tr>
<td>1/13</td>
<td>Course Overview: The Discipline of Political Science</td>
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<tr>
<td>1/20</td>
<td>Motivating Research, Asking Questions, and Conducting Literature Reviews</td>
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Description: Asking a good question is the first step in a good research project. The first reading for this week examine the idea of research and the discipline of political science. It picks up on the themes discussed during the first week. The next reading(s) will be identified by you. It should be a SEMINAL book from your area of research interest, and you should write a 5-8 page review of the book focusing on an assessment of the research design: What is the primary research question? Is the question compelling? Why or what not? What kind of a question is it – one that focuses on what or one that focuses on why? How is previous research used and how is the argument connected to earlier work? How does the author develop and ask the question? What differences and similarities are there in how the authors develop their questions? How is the research discussed in these pieces motivated? You should come prepared to discuss the reading that you select, being ready to summarize the paper for others in the class and discuss the questions above related to your selected reading. This paper is 15 percent of your grade. The paper will be graded on the quality of analysis and writing, and also on the appropriateness of the book selected.

Readings:

- SHIV Chapter 1
- The book you identify

RESEARCH TOPIC SHOULD BE IDENTIFIED

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<th>Date</th>
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<tr>
<td>1/27</td>
<td>The Styles and Goals of Research</td>
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Description: This week we approach the question of what political science research should look like from the perspective of a methodologist. Think about the following questions: What should research look like in political science? What is methodology? Why is it important? How much emphasis is placed on theory for motivating research? Is political research more likely to be inductive or deductive?

- KKV Chapter 1 and 2
- BC Chapters 3 and 5 (Think about reducing this)
- Be prepared to discuss your research questions
Principles of Causal Thinking

Description: Focus on the following questions: What is causality? How does each author think about causation? Is there any other way we might consider approaching research? Is the idea of causality useful for social scientists? What demands does the definition of causality place on how we conduct research?

- SHIV Chapter 6
- KKV Chapter 3
2/10 Theories and Hypotheses

Description: Focus on the following questions: What is a theory? How do hypotheses flow from theories? Can scientific research be done without theories?

- SHIV Chapter 2
- VAN Chapter 1
- Be prepared to discuss the theories that are relevant to your project

2/17 Concept Formation

Description: Focus on the following questions: Why could it be said that concepts are located between theory and data? What is a concept? How does one develop a concept? What role do empirical considerations play in forming concepts? What is a variable and how does it compare to a concept?

- SHIV Chapter 3
- Be prepared to discuss your literature review

LITERATURE REVIEW DUE

2/24 Operationalizing Concepts: Measurement, Validity, Reliability and Generalizability

- SHIV Chapters 4 and 5
- KKV Chapters 4 and 6
Experimental and Observational Designs

Description: Experiments are probably the best design to establish a causal link between two variables because they do a good job of controlling for alternative factors scientifically. However, experiments are a far cry from the real world. What is the power of experimental designs for establishing causality? What drawbacks do experimental designs have in political science? What lessons can we draw from experimental research? What are the threats to the validity of an experimental design? Also, determining what we want to observe is an important part of most research designs. What is an observation? How many do we need to make? What is the difference between an observation and a case? What problems are there with making observations in the real world?

- KKV Chapter 5
- BC Chapter 9
- Be prepared to discuss hypotheses.

HYPOTHESES DUE
3/10 Qualitative Approaches and Case Selection in Observational Designs

Description: All research designs include some decision about which observations to include in an analysis. We’ll focus on these issues from the perspective of comparative research. What are the different types of comparative designs? What do they suggest about what kinds of cases to select for observation? Why is a random selection method inappropriate in small N research? What are the methodological problems and promises of qualitative data?

- BC Chapters 6, 7, and 8
- Chapter 11 in James Mahoney and Dietrich Rueschemeyer, eds. 2003. *Comparative Historical Analysis in the Social Sciences*. New York: Cambridge University Press. By Peter Hall. [RESERVE]

3/17 Spring Break, No Class

3/24 Quantitative Approaches to Observation

Description: The main emphasis of quantitative research is gathering information on a large number of cases and representing it numerically. Many of the same issues that are present in small-N research apply to quantitative research. Thus, most of the readings on small-N studies also help you to understand the basic logic of design that must be applied to quantitative studies. The reading is light this week because we have entire courses devoted to helping you understand how to do quantitative analysis. What are some of the tools used to conduct quantitative research? What do they suggest about what kinds of cases to select for observation? Why is random selection essential in large-N research? What are the methodological problems and promises of quantitative data?

- SHIV Chapters 7, 8, 9, and 10
- Be prepared to discuss and help others solve problems with their research designs

DATA AND MEASUREMENT DUE

3/31 Class Cancelled, Professor to Midwest Conference
History and Non-Observational Approaches

Description: In general, we either use data that comes from direct observation or data that comes from the historical record or other documents. What are the problems of using historical data? How can these problems be dealt with? Is historical data useful for more than providing background?

- Be prepared to discuss and help others solve problems with their research designs

Remaining Dates Presentations and preparation time to be determined based on final enrollment count.