POLISCI 731
SCOPE & METHODS IN POLITICAL SCIENCE

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Course Overview

This course is a graduate-level introduction to conducting research in political science. Given the enormity of the topic, the course focuses on selected topics in the domain of question asking, theory building, and empirical research design, including designs for causal inference. The goal is to give you a broad overview of the practice of political science as *science* to allow you to begin to pursue your own research.[1]

The course is broadly structured in two parts: First, an introduction to theory building, and second, an introduction to the empirical evaluation of theories. The theory building component of the course introduces you to how to ask questions, craft (potential) answers to those questions founded in the preferences and behavior of individuals, and derive hypotheses from those

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[1]In saying that this is a broad overview, students should be aware that there are a multitude of topics that will not be covered, despite their importance to political science research. Beyond topics that are omitted, students should also recognize that each topic that we *do* cover could comprise a course unto itself. It is *as* important for students to recognize what is left out as what we cover in order to see where the knowledge they gain from this course fits into the broader political science endeavor.

answers that can be evaluated with evidence. The empirical research design component of the course addresses the measurement of theoretical constructs of interest, the logic of hypothesis testing, and the ways in which cause can be empirically separated from effect.

Crucially, this course has no prerequisites; so, we will move through the material under the assumption of no prior familiarity with the material. In the process, we will develop distinct skills and understandings—notational, logical, graphical and more.

In addition to exposure to the theory of research and the research of others, this course is also designed to help students develop their own research projects early in their graduate career. By the end of the semester, students will have produced a short research proposal that outlines a question; develops a theory that answers that question; derives a set of hypotheses that can test aspects of that theory; proposes a measurement strategy for the main theoretical constructs of interest; and lays out a set of empirical comparisons that logically evaluate the veracity of the hypotheses.

The final proposal may form the basis for a future paper, or end up in the bottom of a desk drawer never again to see the light of day; however, the *practice* developing these ideas, regardless of the outcome, will be the critical component. Scholars rarely hit on a good design their first go-round. It takes time and practice and lots of failure. But without trying, you cannot succeed.

Learning Goals

Learning goals constitute the concrete, transferrable skills that you will obtain as a consequence of this course. By the end of the course, you will be able to

1. Be able to describe, in broad strokes, different approaches and traditions to political science research; including the basic steps of the scientific method.

2. Differentiate between *descriptive* research questions and *causal* research questions; and identify a related causal question to a given descriptive question (and vice versa).

3. Describe the types of knowledge provided by deductive approaches vs. inductive approaches to theorizing and the ways in which these are related.

4. For a given puzzle/question, sketch a theoretical answer by identifying the actors, their possible actions, and their preferences/payoffs.

5. Use logic to derive testable implications from a theory to a research question.

6. Propose alternative measurement strategies for a given theoretical construct and critique them according to common evaluative criteria.

7. Articulate the fundamental problem of causal inference in terms of counterfactuals.

8. Describe the ideal (albeit potentially infeasible) experiment that would allow for the best answer to a given causal question.

9. For causal empirical research designs covered in class, in general terms, be able to (a) identify the comparison being made, (b) describe how each design approximates the counterfactual condition, and (c) the assumptions that must be true for the comparison to allow for a causal inference to be made.

10. Deliver orally and in writing a succinct research proposal covering the main components of research.

Assignments

A core goal of the this course is to give you the opportunity at the very outset of your graduate career to design your own research to answer a question about the political world that interests you.

The following assignments are designed to help you to achieve the above learning goals, thereby deepening your abstract understanding of the scientific method as it relates to politics, and developing your ability to apply that abstract understanding to your own research. In addition to the assignments, your grade is determined by participation in class and discussion sections.

Quizzes (15%)

I will evaluate your understanding of basic aspects of course material via at least three in-class closed-book quizzes. (In the past, I've planned these and then let students off the hook. This time there WILL be quizzes, so do your readings!) These will be brief pen and paper quizzes that take no-longer than

10 minutes. These quizzes are not designed to be deeply challenging. Instead, they are designed to incentivize you to read the material, review your notes from previous classes, reflect, and achieve the learning goals that I have set out for you. The quizzes will also help me to evaluate your progress towards the learning goals.

Three Research Questions (5%)
DUE: Sept 16 by midnight (via Canvas)

The first assignment is a research question assignment. You will submit three distinct *causal* research questions. You will also be expected to workshop these questions with a group of your fellow students. See Canvas for additional details.

One Theoretical Sketch (10%)
DUE: Oct 7 by midnight (via Canvas)

The second assignment asks you to select one of your research questions from the assignment above (or a new question, or the revised version of a question post-in-class-workshop). You will then outline a theoretical sketch that explains—utilizing concepts and mechanisms—what you think the answer to that question is. In doing so, the theoretical sketch will identify (a) the actors relevant to your particular political dynamic, (b) the actions that those actors can take, and (b) the preferences (and therefore) payoffs that they receive from taking different actions. From that theoretical sketch, you will present, at a minimum, one observable implication of that theory that you can operationalize as an empirically testable hypothesis. See Canvas for additional details.

Empirical Research Design (10%)

DUE: Monday, Nov 4 by midnight (via Canvas)

The third assignment asks you to build on the theoretical sketch and its observable implications that you developed in the previous assignment. You will devise a measurement strategy, and outline a strategy to make comparisons using your measures that allow you to engage in descriptive or causal inference that address your research question. See Canvas for additional details.

In-Class Presentation (10%)

DUE: To be determined

You will present your proposal in a five minute conference-style presentation with slides. This presentation will occur in the second half of the course. See Canvas for additional details.

Final Research Proposal (25%)

DUE: December 11, Wednesday, by midnight (via Canvas)

The final research proposal asks you to pull together information from your above assignments into one succinct proposal that is approximately 10 double-spaced pages. The goal with this proposal is to be concise and utilitarian—you may take slightly more pages, but you need to be thoughtful about what you conclude, and aggressive in how you edit yourself.

Your draft proposal should present (1) your research question, a (2) sketch of the theory and hypotheses you develop, explain a (3) measurement strategy to operationalize the key constructs of interest, a (4) comparisons that evaluate the hypotheses using the operationalized concepts. The final research proposal must incorporate the feedback that you've received on assignments up to this point, including on your presentation. See Canvas for additional details.

Participation (25%)

The course is structured as a hybrid lecture-seminar in which discussing readings, asking questions, and probing topics of interest will be important components. The success of the course will depend on the active engagement of all students in class. Your ability to participate effectively, and earn a grade that reflects that, is a function of your preparation and your conduct in class.

I expect all students not only to have completed readings prior to class, but to have thought about them and reflected on them. While you will develop (or refine) your own strategies of being prepared to participate in class, two of the best strategies are:

- Write a set of questions and thoughts about the reading that you are interested in sharing with the group. Your questions or comments for class may be anything from notational confusion to critiques, extensions, and possible generalizations.

- Although it can be hard to admit places where you didn't understand, I deeply encourage students to bring to share when they are confused in the course content and *why*. These are typically the questions that allow *everyone* in class the opportunity to clarify and solidify their understanding.

Lastly, please bring scratch paper to take notes and work through models and derivations in class. Putting pen to paper is shown to improve learning. We will not be creating or posting lecture slides, and much of what we do in class is *not* conducive to computer note taking.

Discussion Sections

In order to enhance your learning, the course TA will lead discussion sections that allow you a more informal and interactive space in which to engage with the course material. **These sections will occur at an agreed upon time coordinated by us.**

Your attendance in these sections is part of your participation grade. You should be prepared for these sections, ready to participate. Participation may entail active attention to lectures and lessons; asking course-relevant questions;

providing feedback to fellow students; participation in activities; and so forth.

Grading

I will grade on a standard A, B, C grade scale (with +/-).

For doctoral students, our emphasis will be on giving you feedback to help you succeed—not only in this course—but in the program overall. Thus, the feedback is more important than your letter grade and we aim to err on the side of encouraging (re: generous) grading. With that being said, we expect students to be able to achieve a B+ or better in the course. If you're receiving B grades or lower—or your assignment feedback indicates a failure to grasp core components of the course—please come talk to us so that we can figure out what is going on and address it while there is still time.

For Master's students, I also aim to emphasize feedback, but my letter grading will be designed to inform you of how you're doing in the course (use the full range of grades available) as this is important as you move on from the MA to further graduate study, government or industry.

Resources

Appointments

The course has a both a TA and instructor to answer questions. Please reach out to make an appointment with us if we can be helpful with your research proposal or your understanding of the class material. Given the size of the class, I cannot meet with every student to discuss every stage of their project outside of class. As a result, please consult with the TA and your fellow classmates strategically as you are working on your projects to get feedback. And be prepared when you make a meeting with either the TA or me—make sure you know exactly what you want to gain from the meeting. If you have a brief question, you can ask over email as well. You should expect to receive

a response within 48 hours.

Your Fellow Students

Academic scientific is a highly collaborative process. Even when this is not evidenced in formal co-authorships, the way in which your peers can probe, push, and refine your ideas is one of the most valuable (and rewarding, I think) parts of our discipline. Thus, you are welcome to share your ideas widely with students in your cohort or beyond, incorporate their thoughts, and rely on their advice. This will undoubtedly make your final project better.

At the same time, for other small assignments or in approaching the readings, I encourage you to work independently *first*, before having discussions with your fellow students. This will give you an opportunity to practice applying the knowledge that we're developing in class, and gauge your own understanding of the material. However, once you've tried something on your own, seek out your fellow students to share. We are smarter together.

Mental Health

Graduate school is designed to stretch your intellectual abilities so that you can push the frontier of collective knowledge. Doing so necessitates criticism (though hopefully constructive). For many students who have aced school since day one, this is some of the very first true criticism that they've ever received, and it can be difficult to process.

In addition, graduate school also puts you in charge of your own scholarship in a way few students have previously experienced. That freedom can be powerful, but also overwhelming. Questions about productivity, time management, and progress become salient as never before. In addition, the sheer amount of work that you're asked to do in a doctoral program can leave you eating poorly, sleeping poorly, and neglecting yourself in other basic ways. Finally, for students whose specific identities and backgrounds leave them questioning whether they belong, all of these challenges can be multiplied.

All of this stress means that taking care of your mental health is a critical component of graduate school. Learning skills to manage stress, anxiety, criticism and disappointment will make you happier in life overall and a more successful scholar. If the burdens of graduate study ever become too much, reach out to someone, anyone. The circumstances of the lingering pandemic have further augmented these challenges and underline the importance of tak-

ing care of yourself.

Contacts

Academic Resource Center
Find tutors, build your academic skills.
(919) 684-5917
theARC@duke.edu or arc.duke.edu

Thompson Writing Program
Schedule an appointment to discuss ways to improve as a writer.
https://twp.duke.edu/

Student Disability Access Office (SDAO)
For registration of accommodation needs and any other support.
sdao@duke.edu or access.duke.edu

Counseling and Psychological Services (CAPS)
Make counseling appointments and seek referrals to outside therapists.
(919) 660-1000
https://students.duke.edu/wellness/caps/CAPS

TimelyCare (formerly Blue Devils Care)
Convenient, confidential, and free online mental health support.
bluedevilscare.duke.edu

Disability Accommodation

Students with a documented disability should present me with their accommodation letter from the SDAO (see resources above) at their earliest convenience. This letter allows me to follow university policy that accommodates disabilities while also protecting student privacy. Students who need to obtain a letter are encouraged to reach out to SDAO as soon as possible and make sure that

their instructor is informed that a letter can be expected at a later date.

Diversity, Equity and Inclusion (DEI)

I am committed to making this class an open and inclusive environment for everyone. Students should know that they are welcome in class, and that they belong. Their conduct should demonstrate that same respect for others, even when our views differ. If you have issues with DEI that relate to the course, it is my hope that you feel comfortable bringing them to my attention. I am available and open to those discussions, including when they involve my management of class.

In addition to the course environment, DEI is reflected in other aspects of courses, including, for instance, syllabi. I want to bring to students' attention that although the syllabus may reflect some manner of diversity in terms of our discussion of different theoretical and empirical traditions, it is not diverse in the authors we read. This reflects, among other factors, the composition of authorship historically in political science; and the way in which mechanisms of reinforcement have amplified that lack of diversity. In the past, my syllabi for this course have been more diverse. But the exigencies of re-designing the course rather dramatically have subsumed much of that hard work from the past. Awareness is an important step in problem solving, so I bring this to your attention and make you aware that *I* am aware. And I am excited to work on improving the syllabs in the future.

Readings

All readings, unless specifically noted, can be found under the 'Files' tab and the relevant week on the course's Canvas site. I expect you to undertake the readings prior to the class session for which they are listed.

SCHEDULE OVERVIEW

Week	Unit	Class	Topic	Assignment
	I. Introduction			
1	Intro	T 8/26	Introduction	
1	Intro	R 8/28	The Scientific Enterprise	
	<u>Discussion Section</u>: NONE			
	II. Question Asking and Theory Building			
2	Theory	T 9/2	Question Asking	
2	Theory	R 9/4	Theory Building Blocks	
	<u>Discussion Section</u>: Question Workshop			
3	Theory	T 9/9	Concepts	
3	Theory	R 9/11	** NO CLASS **	
	<u>Discussion Section</u>: NONE			
4	Theory	T 9/16	Mechanisms	**DUE:** Three Questions
4	Theory	R 9/18	Rational Choice Approach	
	<u>Discussion Section</u>: Theory generation			
5	Theory	T 9/23	*In Action*: Downs	
5	Theory	R 9/25	Deriving Testable Implications	
	<u>Discussion Section</u>: Hypothesis derivation			
	III. Empirical Testing of Theory			
6	Empirics	T 9/30	Quantitative and Qualitative	
6	Empirics	R 10/2	Measuring Concepts	
	Discussion Section: Measurement workshop			
7	Empirics	T 10/7	*In Action*: Measuring Home Style, Pt. 1	**DUE:** Theoretical Sketch
7	Empirics	R 10/9	*In Action*: Measuring Home Style, Pt. 2	
	<u>Discussion Section</u>: NONE			
8	Empirics	T 10/14	** NO CLASS (Fall Break) **	
8	Empirics	R 10/16	Causal Inference	
	<u>Discussion Section</u>: Counterfactual thinking			
9	Empirics	T 10/21	The Experimental Ideal	
9	Empirics	R 10/23	Natural Experiments	
	<u>Discussion Section</u>: Defining the ideal experiment			
10	Empirics	T 10/28	Example Design: IV	
10	Empirics	R 10/30	Example Design: RDD	
	<u>Discussion Section</u>: RDD in action			
11	Empirics	T 11/4	Mechanisms and Inference	**DUE:** Empirical Design
11	Empirics	R 11/6	Scope and Case Selection	
	<u>Discussion Section</u>: Student proposal presentations			
12	Empirics	T 11/11	** NO CLASS (Veteran's Day) **	
12	Empirics	R 11/13	*In Action*: Military Operations	
	<u>Discussion Section</u>: Student proposal presentations			
13	Empirics	T 11/18	Fieldwork	
13	Empirics	R 11/20	Predictive Inference	
	<u>Discussion Section</u>: Student proposal presentations			
	IV. Conclusion			
14	Conclusion	T 11/25	Paradigms & Problems	

SCHEDULE

WEEK 1

Class 1 — August 26 — Introduction

No readings.

Class 2 — August 28 — The Scientific Enterprise in Politics

Readings to be completed before class:

1. Alan Chalmers (2014). *What is this thing called science?* 4th Edition. University of Queensland Press. **(Introduction, Chs 1-4).**
2. Vivien Lowndes, David Marsh, and Gerry Stoker, eds (2018). *Theory and Methods in Political Science.* Macmillan Publishers. **(Pages 7-30, and 219-236).**
3. Max Weber (2008) [1917]. "Science as a vocation." In: *Max Weber's complete writings on academic and political vocations.* Algora **(27 pages).**
4. Adcock R, Bevir M, Backhouse RE, Fontaine P (2010). "Political Science." In: *The History of the Social Sciences since 1945.* New York, NY: Cambridge University Press. **(Chapter 4, 29 pages).**

Discussion Section: NO DISCUSSION SECTION THIS WEEK.

PART I: Questions and Theory Building in Political Science

WEEK 2

Class 1 — Sept 1 — Asking Questions

Readings to be completed before class:

1. John Elster (2015). *More Nuts and Bolts for the Social Sciences*. Revised Edition. New York: Cambridge University Press. **(Preface and Chapter 1)**.
2. John Gerring (2012). "Mere description." *British Journal of Political Science* Vol. 42 No. 4: 721-746 **(26 pages)**.
3. Fred Eidlin (2011). "The Method of Problems versus the Method of Topics." *PS: Political Science and Politics.* Vol. 44 No. 4. **(5 pages)**.
4. Geddes, Barbara. *Paradigms and sand castles: Theory building and research design in comparative politics.* University of Michigan Press, 2003. **Chapter 2, pg. 27-47**.

Class 2 — Sept 4 — Theory Building Blocks

Readings to be completed before class:

1. Hal Varian (1994). "How to Build an Economic Model in Your Spare Time." In: *Passion and Craft: Economists at Work*, edited by Michael Szenberg. Ann Arbor, MI: University of Michigan Press. **(16 pages)**.
2. James Jaccard and Jacob Jacoby (2020). *Theory Construction and Model-Building Skills: A Practical Guide for Social scientists.* 2nd. New York: The Guilford Press. **(part of Chapter 2, pages 29-45, 16 pages; Chapter 4, 23 pages; Chapter 10, 23 pages)**.

Discussion Section: Workshop for student research questions.

WEEK 3

Class 1 — Sept 9 — Concepts and Conceptualization

Readings to be completed before class:

1. Giovanni Sartori (1970). "Concept mis-formation in comparative politics." *American Political Science Review* Vol. 64, No. 4: 1033-1053. **(21 pages)**.

2. Gary Goertz and James Mahoney (2012). "Concepts: Definitions, Indicators and Error." In: *A Tale of Two cultures: Qualitative and Quantitative Research in the Social Sciences.* Princeton, NJ: Princeton University Press. **(13 pages)**.

3. Michael Ward (2017). "Do We Have Too Much Theory in International Relations or Do We Need Less? Waltz Was Wrong, Tetlock Was Right." *Oxford Research Encyclopedia of Politics.* New York, NY: Oxford University Press. **(21 pages)**.

Class 2 — Sept 11 — **NO CLASS**

Discussion Section: NO DISCUSSION SECTION THIS WEEK.

WEEK 4

Class 1 — Sept 16 — Mechanisms

Readings to be completed before class:

1. Peter Hedstrom and Richard Swedberg (1998). "Introductory Essay." In: *Social Mechanisms: An Analytical Approach to Social Theory.* Peter Hedstrom and Richard Swedberg, eds. New York, NY: Cambridge University Press. **(32 pages)**.

2. John Elster (2015). *More Nuts and Bolts for the Social Sciences.* Revised Edition. New York: Cambridge University Press. **(Chapters 2, 3, 4, 10)**.

Class 2 — Sept 18 — The Rational Choice Framework for Theorizing

★ **DUE**: Three research questions assignment (Sept 18, midnight)

Readings to be completed before class:

1. Joe A. Oppenheimer (2008). "Rational Choice Theory." In: *The Sage encyclopedia of Political Theory*, Robert Adcock, ed. **(18 pages).**

2. Andrew Hindmoor and Brad Taylor (2018). "Rational Choice" in Vivien Lowndes, David Marsh, and Gerry Stoker, eds *Theory and Methods in Political Science.* New York, NY: Macmillan Publishers. **(Pages 48-53, 6 pages).**

3. John Elster (2015). *More Nuts and Bolts for the Social Sciences.* Revised Edition. New York, NY: Cambridge University Press. **(Pages 256-69, 13 pages).**

4. Ariel Rubinstein (2006). "Dilemmas of an Economic Theorist." *Econometrics.* Vol. 74, No. 4. **(19 pages).**

Discussion Section: Designing theory.

WEEK 5

Class 1 — Sept 23 — *In Action (A Model)*: Downsian Democracy

1. Matthew Jackson (2011). "A Brief Introduction to Game Theory." *Mimeo.* **(21 pages)**.

2. Anthony Downs (1957). "An Economic Theory of Political Action in Democracy." *Journal of Political Economy.* Vol. 65, No. 2. **(17 pages)**.

Class 2 — Sept 25 — Deriving Observable Implications from Theory

Readings to be completed before class:

1. Karl Popper (1962). "Science: Conjectures and Refutations." In: *Conjectures and Refutations: the Growth of Scientific Knowledge.* New York, NY: Basic Books. **(Chapter 1, 22 pages)**.

2. Heather Douglas and P.D. Magnus (2013). "State of the Field: Why novel prediction matters." *Studies in History and Philosophy of Science.* Vol. 44. **(10 pages)**.

3. Scheel, A. M., Tiokhin, L., Isager, P. M., Lakens, D. (2021). "Why Hypothesis Testers Should Spend Less Time Testing Hypotheses." *Perspectives on Psychological Science.* 16(4), 744-755. **(12 pages)**.

4. Geddes, Barbara. *Paradigms and sand castles: Theory building and research design in comparative politics.* University of Michigan Press, 2003. **Pages 64-69 (6 pages)**.

Discussion Section: Hypothesis derivation exercise.

PART II: The Empirical Evaluation of Theories

WEEK 6

Class 1 — Sept 30 — Quantitative and Qualitative Traditions

Readings to be completed before class:

1. James Mahoney and Gary Goertz (2006). "A tale of two cultures: Contrasting quantitative and qualitative research." *Political Analysis* Vol. 14, No. 3: 227-249 **(20 pages)**.

2. Gary King, Robert O. Keohane, and Sidney Verba (1994). *Designing social inquiry: Scientific inference in qualitative research.* Princeton, NJ: Princeton University Press. **(Chapter 1)**.

3. Rudra Sil and Peter Katzenstein (2010). "Analytic Eclecticism in the Study of World Politics: Reconfiguring Problems and Mechanisms across Research Traditions." *Perspectives on Politics.* **(15 pages)**.

Class 2 — Oct 2 — Concept Measurement & Descriptive Inference

Readings to be completed before class:

1. Simon Jackman (2010). "Measurement." In: *The Oxford Handbook of Political Methodology.* Janet M. Box-Steffensmeier, Henry E. Brady and David Collier, eds. New York, NY: Oxford University Press. **(33 pages)**.

2. David Collier, Jody Laporte and Jason Seawright (2010). "Typologies." In: *The Oxford Handbook of Political Methodology.* Janet M. Box-Steffensmeier, Henry E. Brady and David Collier, eds. New York, NY: Oxford University Press. **(20 pages)**.

3. Gary Goertz and James Mahoney (2012). "Meaning and Measurement." In: *A Tale of Two Cultures: Qualitative and Quantitative Research in the Social Sciences.* Princeton, NJ: Princeton University Press. **(12 pages)**.

Discussion Section: Measurement workshop.

WEEK 7

Class 1 — Oct 7 — *In Action (Measurement)*: Home Style, Part I

★ **DUE**: Theoretical sketch assignment (Oct 7, midnight)

Readings to be completed before class:

1. Richard E. Fenno Jr. (1978). *Home Style.* New York, NY: Basic Books. **(Chapter 3, 4, Appendix)**.

Class 2 — Oct 9 — *In Action (Measurement)*: Home Style, Part II

Readings to be completed before class:

1. Justin Grimmer (2013). *Representational Style in Congress: What Legislators Say and Why it Matters.* New York, NY: Cambridge University Press. **(Chapters 3, 4 and 5)**.

Discussion Section: NO DISCUSSION SECTION THIS WEEK.

WEEK 8

Class 1 — Oct 14 — **NO CLASS**

Fall Break.

Class 2 — Oct 16 — Counterfactuals, Potential Outcomes & Causal Inference

Readings to be completed before class:

1. Stephen Morgan and Christopher Winship (2014). *Counterfactuals and Causal Inference.* 2nd Edition. New York: Cambridge University Press. **(Chapter 2)**.

2. David A. Freedman (2010). "Statistical Models and Shoe Leather." In: *Statistical Models and Causal Inference.* David Collier, Jasjet Sekhon and Philip B. Stark, eds. New York: Cambridge University Press.

Discussion Section: Workshop on counterfactual thinking.

WEEK 9

Class 1 — Oct 21 — The Experimental Ideal

Readings to be completed before class:

1. Paul R. Rosenbaum (2017). *Observation and Experiment: An Introduction to Causal Inference.* Cambridge, MA: Harvard University Press. **(Chapters 1-4, 70 pages)**.

Class 2 — Oct 23 — These Things Called Natural Experiments

Readings to be completed before class:

1. Thad Dunning (2008). "Improving Causal Inference: Strengths and Limitations of Natural Experiments." *Political Research Quarterly.* Vol. 61. No. 2.

2. 99% Invisible. "Episode 352: Uptown Squirrel." URL: https://99percentinvisible.org/episode/uptown-squirrel

Discussion Section: Defining the ideal experiment.

WEEK 10

Class 1 — Oct 28 — Example Causal Design: Instrumental Variables

Readings to be completed before class:

1. Stephen Morgan and Christopher Winship (2014). *Counterfactuals and Causal Inference.* 2nd Edition. New York: Cambridge University Press. **(Chapter 9)**.

Class 2 — Oct 30 — Example Causal Design: Regression Discontinuity

Readings to be completed before class:

1. Stephen Morgan and Christopher Winship (2014). *Counterfactuals and Causal Inference.* 2nd Edition. New York: Cambridge University Press. **(Chapter 11)**.

Discussion Section (** with readings **): *In Action (Regression Discontinuity)*: The Vichy division of France

1. Ferwerda, Jeremy and Nicholas L. Miller (2014). "Political Devolution and Resistance to Foreign Rule: A Natural Experiment." *American Political Science Review.*
2. Kocher, Matthew A. and Nuno P. Monteiro. "Lines of Demarcation: Causation, Design-Based Inference, and Historical Research." *Perspectives on Politics.*

WEEK 11

Class 1 — Nov 4 — Mechanisms, Theory Adjudication & Causal Inference

Readings to be completed before class:

1. Stephen L. Morgan and Christopher Winship (2014). *Counterfactuals and Causal Inference.* 2nd Edition. New York, NY: Cambridge University Press. **Chapter 10**.

2. Paul R. Rosenbaum (2017). *Observation and Experiment: An Introduction to Causal Inference.* Cambridge, MA: Harvard University Press. **(Chapter 7)**.

Class 2 — Nov 6 — Scope and External Validity

Readings to be completed before class:

1. Pritchett, Lant, and Justin Sandefur. "Learning from experiments when context matters." *American Economic Review: Papers and Proceedings* 105.5 (2015): 471-75 **(4 pages)**.

2. Egami, Naoki and Erin Hartman (2023). "Elements of External Validity: Framework, Design, and Analysis." *American Political Science Review* 117(3): 1070-1088 **(18 pages)**.

Discussion Section: Student proposal presentations (group 1).

WEEK 12

Class 1 — Nov 11 — **NO CLASS**

Veteran's Day holiday.

Class 2 — Nov 13 — Case Selection

Readings to be completed before class:

1. Jason Seawright and John Gerring (2008). "Case selection techniques and case studies: A Menu of Qualitative and Quantitative Options." *Political Research Quarterly.* Vol. 61, No. 2. **(14 pages)**.

2. Evan Lieberman (2005). "Nested Analysis as a Mixed-Method Strategy for Comparative Research." *American Political Science Review.* Vol. 99, No. 3. **(17 pages)**.

3. Geddes, Barbara. *Paradigms and sand castles: Theory building and research design in comparative politics.* University of Michigan Press, 2003. **Chapter 3 (40 pages)**.

Discussion Section: Student proposal presentations (group 2).

WEEK 13

Class 1 — Nov 18 — Fieldwork and Archival Work

Readings to be completed before class:

1. Ian Lustick (1996). "History, Historiography, and Political Science: Multiple Historical Records and the Problem of Selection Bias." *American Political Science Review.* 90(3):605-618. **(13 pages).**

2. Alex Lee (2015). "How (and How Not) to Use Archival Sources in Political Science." *Journal of Historical Political Economy.* **(27 pages).**

3. Kate Cronin-Furman, and Milli Lake (2018). "Ethics abroad: Fieldwork in fragile and violent contexts." *PS: Political Science Politics.* Vol. 51, No. 3: 607-614 **(6 pages)**.

4. Scott Desposato (2018). "Subjects and scholars' views on the ethics of political science field experiments." *Perspectives on Politics.* Vol. 16, No. 3: 739-750 **(9 pages)**.

5. Anthony Kwame Harrison (2020). "Ethnography." In: *Oxford Handbook of Qualitative Research.* 2nd Edition. Patricia Leavy, ed. New York, NY: Oxford University Press. **(31 pages)**.

Class 2 — Nov 20 — The Role of Prediction in Political Science

Readings to be completed before class:

1. Keith Dowding, and Charles Miller (2019). "On prediction in political science." *European Journal of Political Research.* Vol. 58, No. 3: 1001-1018 **(15 pages)**.

2. Jake M. Hofman, et al (2021). "Integrating explanation and prediction in computational social science." *Nature* 595.7866: 181-188 **(8 pages)**.

3. The Forecasting Collaborative (2023). "Insights into the accuracy of social scientist forecasts of societal change." *Nature and Human Behavior.* Vol. 7. **(Pages 484–501, 17 pages)**.

Discussion Section: Student proposal presentations (group 3).

PART III: Conclusion

Class 1 — Nov 25 — Paradigms and World Problems

Readings to be completed before class:

1. Thomas Kuhn (1996) [1962]. *The structure of Scientific Revolutions.* Third Edition. Chicago, IL: The University of Chicago Press. **(Chapters 2, 9; 5-8 are nice but not required)**.

2. D. Easton (1969). "The New Revolution in Political Science." *American Political Science Review.* Vol. 63, No. 4: 1051-1061. **(10 pages)**.

SUPPLEMENTARY READING LIST

Sometimes the major hurdle is just knowing what the topic is, what the term is and where to go looking for more information. This supplementary list is designed to help you get started in that domain. Are the topics exhaustive? Nope. Are the readings necessarily the most famous or singularly important? Nope. Are the reading lists exhaustive? Haha, you're kidding, right?

Once you've read something on this list, what do you do? Raid the bibliography to go back in time; then put the paper into Google Scholar, click on the citations list by the paper and raid the list of papers that have cited the one you read.

John Snow, Cholera and Epidemiology
Understanding the history of social science and the development of causal inferential techniques through the history of epidemiology.

1. Steven Johnson (2006). *The Ghost Map. The Story of London's Most Terrifying Epidemic–and how it Changed Science, Cities, and the Modern World.* New York, NY: Riverhead Books.
2. Thomas Coleman (2019). "Causality in the Time of Cholera: John Snow As a Prototype for Causal Inference." Available at SSRN: `http://dx.doi.org/10.2139/ssrn.3262234`

Interpretivist Approaches
Is there objective truth in politics? Or is it all subjectively relative?

1. Lisa Whedeen (2015). *Ambiguities of Domination Politics, Rhetoric, and Symbols in Contemporary Syria.* Chicago IL: University of Chicago Press.
2. Lisa Wedeen (2002). "Conceptualizing Culture: Possibilities for Political Science." American Political Science Review. 96(4):713-728. `doi:10.1017/S0003055402000400`
3. Frederic Charles Schaffer (2015). *Elucidating Social Science Concepts: An interpretivist guide.* New York, NY: Routledge.
4. Mark Bevir and R.A.W. Rhodes, eds (2016). *Routledge Handbook of*

Interpretive Political Science. New York, NY: Routledge.

Race as a Concept, and its Causal Effect

What is race as a concept in the domain of modern causal inference? Is 'discrimination caused by race' a causal quantity that can be estimated? If not, what causal quantity related to race and discrimination can be estimated?

1. Dean Knox, W Lowe, Jonathan Mummolo (2020). "Administrative Records Mask Racially Biased Policing." *American Political Science Review.* 114(3): 619-637. `doi:10.1017/S0003055420000039`

2. Issa Kohler-Hausmann (2019). "Eddie Murphy and the Dangers of Counterfactual Causal Thinking About Detecting Racial Discrimination." 113 Nw. U. L. Rev. 1163. `https://scholarlycommons.law.northwestern.edu/nulr/vol113/iss5/6`

3. Ian Lundberg (2024). "The Gap-Closing Estimand: A Causal Approach to Study Interventions That Close Disparities Across Social Categories." *Sociological Methods & Research.* 53(2), 507-570. `https://doi.org/10.1177/00491241211055769`

Methodological Individualism

Is politics the study of people? Of structures? Of both? Of neither?

1. Jon Elster (1982). "The Case for Methodological Individualism." *Theory and Society*, 11(4), 453–482. http://www.jstor.org/stable/657101

2. Geoffrey M. Hodgson (2007). "Meanings of methodological individualism." *Journal of Economic Methodology*, 14(2), 211–226. `https://doi.org/10.1080/13501780701394094`

Directed Acyclic Graphs (DAGs)

An alternative view of causal inference pioneered by Judea Pearl.

1. Judea Pearl (2009). *Causality: Models, Reasoning and Inference.* 2nd edition. New York, NY: Cambridge University Press.

2. Judea Pearl, Madelyn Glymour and Nicholas Jewell (2015). *Causal In-*

ference in Statistics - A Primer. 1st edition. New York, NY: Wiley.

AI and Data Generation

Should AI generate my data for me?

1. Saahil Desai (2023). "Return of the People Machine: No one responds to polls anymore. Researchers are now just asking AI instead." *The Atlantic.* April 3, 2023. `https://www.theatlantic.com/technology/archive/2023/04/polls-data-ai-chatbots-us-politics/673610/`

2. Bisbee, J., Clinton, J., Dorff, C., Kenkel, B., Larson, J. (2023, May 4). "Synthetic Replacements for Human Survey Data? The Perils of Large Language Models." `https://doi.org/10.31235/osf.io/5ecfa`

Experiments

Everything that is more rich and complex than simply "was your treatment randomly applied."

1. Guido Imbens and Donald Rubin (2015). *Causal Inference for Statistics, Social, and Biomedical Sciences: An Introduction.* 1st edition. New York, NY: Cambridge University Press.

Connecting Theory and Statistical Evidence

What is your estimand?

1. Lundberg, I., Johnson, R. Stewart, B. M (2021). "What Is Your Estimand? Defining the Target Quantity Connects Statistical Evidence to Theory." *American Sociological Review.* Vol. 86, 532–565.

2. Tara Slough (2022). "Phantom Counterfactuals." *American Journal of Political Science.* Vol. 67, No. 1.

Ethical Research with Human Subjects

How we ethically conduct our research is extremely important.

1. American Political Science Association (2020). "Principles and guidance for human subjects research." **(20 pages)**.

The EITM Approach
Empirical Implications of Theoretical Models.

1. John Aldrich, James E. Alt, and Arthur Lupia (2008). "The EITM Approach: Origins and Interpretations", In: *The Oxford Handbook of Political Methodology*, Janet M. Box-Steffensmeier, Henry E. Brady, and David Collier, eds. `https://doi.org/10.1093/oxfordhb/9780199286546.003.0037`

Difference-in-Differences
We have two groups and two time periods; can we make a causal inference? We have two groups and many time periods; what about now? We have many groups and many time periods; what about now?

1. Andrew Baker Brantly Callaway Scott Cunningham Andrew Goodman-Bacon Pedro H. C. Sant'Anna, 2025. "Difference-in-Differences Designs: A Practitioner's Guide," Papers 2503.13323, arXiv.org, revised Jun 2025. *Forthcoming in the Journal of Economic Literature.*

Matching
As a method of causal inference, model dependence or 'other', depending on the perspective.

1. Elizabeth A. Stuart (2010). "Matching Methods for Causal Inference: A Review and a Look Forward." *Statistical Science.* Vol. 25, No. 1. Pages 1-21.
2. Gary King and Richard Nielsen (2019). "Why Propensity Scores Should Not Be Used for Matching." *Political Analysis.* Vol. 27 No. 4. Pages 435-454. `https://tinyurl.com/y5b5yjxo`

Sampling

What units are we studying? How did with come to be studying those units and not other units? What does our choice of units mean for the conclusions that we can draw?

1. Cochran, W. G. (1977). *Sampling Techniques* (3rd ed.). John Wiley Sons.

2. Wu, C., Thompson, M. E. (2020). *Sampling Theory and Practice.* Springer International Publishing.

Political Networks

Thinking about the particular structure of connections between individuals and how those structures give rise to political outcomes.

1. David Lazer (2011). "Networks in political science: Back to the future." *PS: Political Science Politics*, 44(1), 61-68.

2. Jennifer Nicoll Victor, Alexander H. Montgomery, Mark Lubell, eds (2016). *The Oxford Handbook of Political Networks.* New York, NY: Oxford University Press. `https://doi.org/10.1093/oxfordhb/9780190228217.001.0001`

Functionalist Explanation

Could evolutionary social science offer a supporting logic for functionalist theories? Maybe, but is it really functionalism then?

1. Kincaid, Harold (2006). "Functional Explanation and Evolutionary Social Science," in *Handbook for the Philosophy of Science: Philosophy of Anthropology and Sociology*, Mark Risjord and Stephen Turner eds. New York, NY: Elsevier. pp. 213-249.

Agent Based Modeling

What if we want to simulate complex systems with computational methods rather than solve a formal model analytically looking for a closed form solution?

1. Scott De Marchi, Scott E. Page (2014). "Agent-based models." *Annual Review of Political Science*, 17(1), 1-20.

2. Paul Smaldino (2023). *Modeling Social Behavior: Mathematical and Agent-Based Models of Social Dynamics and Cultural Evolution*. Princeton, NJ: Princeton University Press.

Qualitative Data Analysis (QDA)

What do you do with qualitative data? How do you reference it?

1. Johnny Saldaña (2020). "Qualitative Data Analysis Strategies." In: *Oxford Handbook of Qualitative Research*. 2nd Edition. Patricia Leavy, ed. New York, NY: Oxford University Press. `https://doi.org/10.1093/oxfordhb/9780190847388.013.33`

2. Jacobs AM, Buthe T, Arjona A, et al. "The Qualitative Transparency Deliberations: Insights and Implications." *Perspectives on Politics*. 2021;19(1):171-208. `doi:10.1017/S1537592720001164`

Rationality and Macro Order

To what extent does rationality need to exist in order for macro order to obtain? Are economic systems predicated on rationality?

1. Kenneth J. Arrow (1986). "Rationality of Self and Others in an Economic System." *The Journal of Business*, 59(4), S385–S399. `http://www.jstor.org/stable/2352770`.

2. Gary S. Becker (1962). "Irrational Behavior and Economic Theory." *Journal of Political Economy*, 70(1), 1–13. `http://www.jstor.org/stable/1827018`.

More on Concepts

What is the role of concept in social science?

1. Reinhard Bendix (1963). "Generalizations in Comparative Sociological Studies." *American Sociological Review*. Vol. 28, No. 4. `https://www.jstor.org/stable/2090069`.

2. Gary Goertz and James Mahoney (2012). "Concepts: Definitions, Indicators, and Error." In: *A Tale of Two Cultures.* Princeton, NJ: Princeton University Press. `https://www.jstor.org/stable/j.cttq94gh.13`

Multi-causality

There's too few observations. What to do?

1. Robert J. Franzese (2009). "Multicausality, Context-Conditionality, and Endogeneity." In: *Oxford Handbook of Comparative Politics.* Susan Stokes and Carles Boix, eds. `https://doi.org/10.1093/oxfordhb/9780199566020.003.0002`.