

# Designing Validity for Studies of Political Violence, Human Rights, and Conflict

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## Introduction

This class will provide graduate students with an introduction to the scientific method and an overview of how to apply it to the study of politics. Students will learn the fundamentals of the scientific method and, through research design, how to improve both causal inference and the measurement of political phenomena.

## Readings

1. Dunning — Dunning, Thad. 2012. *Natural Experiments in the Social Sciences: A Design-Based Approach*. Cambridge: Cambridge University Press.
2. Trochim and Donnelly — Trochim, William and James P. Donnelly. 2007. *The Research Methods Knowledge Base*, 3rd Edition. Cincinnati, OH, Atomic Dog Publishing.  
<http://www.socialresearchmethods.net/kb/>
3. Additional articles and chapters are listed below. Copies of these readings will be provided by the instructor.

## Introduction to R Material (Optional)

1. Matloff, Norman. 2011. *Art of R Programming: A Tour of Statistical Software Design*. no starch press.
2. Teetor, Paul. 2011. *R Cookbook* O'Reily.  
<https://ase.tufts.edu/bugs/guide/assets/R%20Cookbook.pdf>

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## Day 1: Designing Validity

### *Lecture Readings:*

1. Trochim and Donnelly. Ch 1: "Introduction" and Ch 6: "Design."
2. Rubin, Donald B. 2008. "For Objective Causal Inference, Design Trumps Analysis." *Annals of Applied Statistics* 2(3):808-840.
3. Shadish, William R. 2010. "Campbell and Rubin: A Primer and Comparison of Their Approaches to Causal Inference in Field Settings." *Psychological Methods* 15(1):3-17.

### *Discussion/Applied Readings:*

4. Lin, Winston, Donald P. Green, and Alexander Coppock. "Standard operating procedures for Don Greens lab at Columbia." Version 1.05: June 7, 2016.  
<https://github.com/acoppock/Green-Lab-SOP>

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## Day 2: Experimental Designs

### *Lecture Readings:*

1. Hyde, Susan. 2015. "Experiments in International Relations: Lab, Survey, and Field." *Annual Review of Political Science* 18:403-424.
2. Trochim and Donnelly. Ch 7: "Experimental Design."

### *Discussion/Applied Readings:*

3. Blattman, Christopher and Jeannie Annan. 2016. "Can Employment Reduce Lawlessness and Rebellion? A Field Experiment with High-Risk Men in a Fragile State." *American Political Science Review* 110(1):1-17.
4. Crabtree, Charles D., Christopher J. Fariss, and Holger L. Kern. "Truth Replaced by Silence: A Field Experiment on Private Censorship in Russia." working paper.

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### **Day 3: Quasi-Experimental Designs: Non-Equivalent Group Designs**

#### ***Lecture Readings:***

1. Dunning. Ch 2: "Standard Natural Experiments."
2. Trochim and Donnelly. Ch 9: "Quasi-Experimental Design."
3. Trochim and Donnelly. Ch 10: "Advanced Design Topics."

#### ***Discussion/Applied Readings:***

4. Hyde, Susan. 2007. "The Observer Effect in International Politics: Evidence from a Natural Experiment." *World Politics* 60:37-63.
5. Posner, Daniel N. 2004. "The Political Salience of Cultural Difference: Why Chewas and Tumbukas Are Allies in Zambia and Adversaries in Malawi." *American Political Science Review* 98(4):529-545.

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### **Day 4: Quasi-Experimental Designs: Interrupted Time-Series and Matching Designs**

#### ***Lecture Readings:***

1. King, Gary, Christopher Lucas, and Richard Nielsen. "The Balance-Sample Size Frontier in Matching Methods for Causal Inference." *American Journal of Political Science*.

#### ***Discussion/Applied Readings:***

2. Campbell, Donald T. and H. Laurence Ross. 1968. "Analysis of Data on the Connecticut Speeding Crackdown as a Time-Series Quasi-Experiment." *Law and Society Review* 3(1):55-76.
3. Lyall, Jason. 2010. "Are Co-Ethnics More Effective Counter-Insurgents? Evidence from the Second Chechen War." *American Political Science Review* 104(1):1-20.

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## **Day 5: Quasi-Experimental Designs: Regression Discontinuity Designs**

### ***Lecture Readings:***

1. Dunning. Ch 3: “Regression-discontinuity designs.”
2. Dunning. Ch 4: “Instrumental-variables designs.”

### ***Discussion/Applied Readings:***

3. Conrad, Courtenay R., and Emily Hencken Ritter. 2016. “Preventing and Responding to Dissent: The Observational Challenges of Explaining Strategic Repression.” *American Political Science Review* 110(1):85-99.
4. Ferwerda, Jeremy A. and Nicholas L. Miller. 2014. “Political Devolution and Resistance to Foreign Rule: A Natural Experiment” *American Political Science Review* 108(3):642-660.

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## **Day 6: Quasi-Experimental Designs: Instrumental Variable Designs**

### ***Lecture Readings:***

1. Dunning. Ch 4: “Instrumental-variables designs.”
2. Sovey, Allison J., and Donald P. Green. 2010. “Instrumental Variables Estimation in Political Science: A Readers Guide.” *American Journal of Political* 55(1):188-200.

### ***Discussion/Applied Readings:***

3. Conrad, Courtenay R., and Emily Hencken Ritter. 2016. “Preventing and Responding to Dissent: The Observational Challenges of Explaining Strategic Repression.” *American Political Science Review* 110(1):85-99.
4. Sarsons, Heather. 2015. “Rainfall and conflict: A cautionary tale.” *Journal of Development Economics* 115:62-72.

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## **Day 7: Measurement Designs: Data, Validity, and Reliability**

### ***Lecture Readings:***

1. Adcock, Robert, and David Collier. 2001. "Measurement Validity: A Shared Standard for Qualitative and Quantitative Research." *American Political Science Review* 95(3):529–546.
2. Jackman, Simon. 2008. "Measurement." In *The Oxford Handbook of Political Methodology*, edited by Janet M. Box-Steffensmeier, Henry E. Brady, and David Collier. Oxford University Press.
3. Trochim and Donnelly. Ch 3: "The Theory of Measurement."

### ***Discussion/Applied Readings:***

4. Driscoll, Jesse and Elaine Denny. "Fear of Anarchy or Fear of a Predatory State?: Using Survey Non-Response To Assess Somali State Legitimacy." working paper.
5. Fariss, Christopher J. Forthcoming. "The Changing Standard of Accountability and the Positive Relationship between Human Rights Treaty Ratification and Compliance." *British Journal of Political Science*.

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## **Day 8: Observational Data and Design Choice**

### ***Lecture Readings:***

1. Imai, Kosuke, Luke J. Keele, Dustin Tingley, and Teppei Yamamoto. 2011. "Unpacking the Black Box of Causality: Learning about Causal Mechanisms from Experimental and Observational Studies." *American Political Science Review* 105(4):765-789.
2. Shmueli, Galit. 2010. "To Explain or to Predict?." *Statistical Science* 25(3):289-310.

### ***Discussion/Applied Readings:***

3. Hill, Daniel W., Jr. and Zachary M. Jones. 2014. "An Empirical Evaluation of Explanations for State Repression." *American Political Science Review* 108(3):661-687.

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## **Day 9: Case Studies, Case Selection, and Qualitative Evidence**

### ***Lecture Readings:***

1. Dunning. Ch. 7: “The central role of qualitative evidence.”

### ***Discussion/Applied Readings:***

2. Geddes, Barbara. 1990. “How the Cases You Choose Affect the Answers You Get.” *Political Analysis* 2:131-150.
3. Nielsen, Richard. 2016. “Case Selection via Matching.” *Sociological Methods and Research* 45(3):569-597
4. Seawright, Jason and John Gerring. 2008. “Case Selection Techniques in Case Study Research: A Menu of Qualitative and Quantitative Options.” *Political Research Quarterly* 61(2):294-308.

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## **Day 10: Enhancing External Validity and Generalizability: Transparency, Replication, and Reproduction**

### ***Lecture Readings:***

1. Dunning. Ch. 5: “Simplicity and Transparency: keys to quantitative analysis.”

### ***Discussion/Applied Readings:***

2. Crabtree, Charles D. and Christopher J. Fariss. 2016. “Stylized Facts and Experimentation.” *Sociological Science* 3:910-914.
3. Dafoe, Allan. 2014. “Science Deserves Better: The Imperative to Share Complete Replication Files.” *PS: Political Science & Politics* 47(1):60-66.
4. Fariss, Christopher J. and Zachary M. Jones. “Enhancing External Validity in Observational Settings When Replication is Not Possible.” *Political Science Research & Methods*.
5. Olken, Benjamin A. 2015. “Promises and Perils of Pre-analysis Plans.” *Journal of Economic Perspectives* 29(3):61-80.

## **Additional Course Information**

### **Resources for Harassment**

Title IX makes it clear that violence and harassment based on sex and gender, including violence and harassment based on sexual orientation, are a Civil Rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, etc. If you or someone you know has been harassed or assaulted, you can find the appropriate resources here: [www.bw.edu/resources/hr/harass/policy.pdf](http://www.bw.edu/resources/hr/harass/policy.pdf)

### **Language and Gender**

“Language is gender-inclusive and non-sexist when we use words that affirm and respect how people describe, express, and experience their gender. Just as sexist language excludes women’s experiences, non-gender-inclusive language excludes the experiences of individuals whose identities may not fit the gender binary, and/or who may not identify with the sex they were assigned at birth. Identities including trans, intersex, and genderqueer reflect personal descriptions, expressions, and experiences. Gender-inclusive/non-sexist language acknowledges people of any gender (for example, first year student versus freshman, chair versus chairman, humankind versus mankind, etc.). It also affirms non-binary gender identifications, and recognizes the difference between biological sex and gender expression. Teachers and students should use gender-inclusive words and language whenever possible in the classroom and in writing. *Students, faculty, and staff may share their preferred pronouns and names, either to the class or privately to the professor, and these gender identities and gender expressions should be honored.*” For more information:

[www.wstudies.pitt.edu/faculty/gender-inclusivenon-sexist-language-syllabi-statement](http://www.wstudies.pitt.edu/faculty/gender-inclusivenon-sexist-language-syllabi-statement).

### **Syllabus Acknowledgments**

This syllabus is based on several courses that I have taken and designed over the last several years. Some of the material is based on the Research Design (PL SC 501) course that I developed at Pennsylvania State University when I began teaching there in the fall of 2013, which itself is based on similar course developed by David Lake and Mathew McCubbins at the University of California, San Diego. It is also based on material that I developed for a graduate measurement theory class (PL SC 597) and undergraduate Social Data Analysis and Design class (SO DA 308) that I also developed at Pennsylvania State University. Elements of the syllabus and other class materials created for this class are also based in part on the Bayesian Statistics class offered by Seth Hill at University of California, San Diego and the Measurement class offered by Keith Poole at UCSD and now the University of Georgia.