# Empirical Research Methods

INTA 6003

## Instructor Info ——

👤 David Muchlinski

🕑 TH 12-2pm via CiscoWebEx

📍 Habersham 147

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## Course Info ———

⚡ Prereq: None

📅 Tuesday

🕑 6:30p-9:15p

📍 TBD

## Overview

This course is designed to introduce you to the process of empirical research in the study of international affairs and political science. In this seminar you will learn the basics of how to construct scholarly theories, correctly criticize existing scholarly research, understand scholarly literature, and conduct original, graduate-level research. Topics to be covered include:

- What is Grad School and What is My Role in it?
- Ontology & Epistemology
- The Scientific Study of Politics
- Social Science Theory
- Research Design
- Least Squares and Maximum Likelihood Regression Models
- Understanding the Literature
- Developing Critical Thought

This seminar meets weekly for 2.75 hours. Like other graduate seminars, student participation is fundamental. Graduate seminars are driven by critical discussion rather than lectures. You must come to class having read all material assigned for that week ready to discuss in detail what you have gleaned from the reading. Discussion is expected to be critical and in depth. You are expected to go beyond the mere superficial *what* of the reading to a critical analysis of *why, how, under what conditions, and so what*.

## Material

### Required Texts

Chalmers, A. F. (2013). *What is this Thing Called Science?*. 4th Edition. Hackett Publishing.

King, G., Keohane, R. O., & Verba, S. (1994). *Designing Social Inquiry: Scientific Inference in Qualitative Research*. Princeton University Press.

Lewis-Beck, C., & Lewis-Beck, M. (2015). *Applied Regression: An Introduction*. Sage Publications.

Gujarati, D. N. (2009). Basic Econometrics. Tata McGraw-Hill Education.

Eliason, S. R. (1993). Maximum Likelihood Estimation: Logic and Practice (No. 96). Sage.

Long, J. S. (1997). Regression Models for Categorical and Limited Dependent Variables (Vol. 7). Advanced Quantitative Techniques in the Social Sciences.

### Recommended Reference Texts

Wickham, H., & Grolemund, G. (2016). R for Data Science: Import, Tidy, Transform, Visualize, and Model Data. O'Reilly Media, Inc. Available online at `https://r4ds.had.co.nz/`

Xie, Y., Allaire, J. J., & Grolemund, G. (2018). R Markdown: The Definitive Guide. CRC Press. Available online at `https://bookdown.org/yihui/rmarkdown/`

Fox, J., & Weisberg, S. (2018). *An R Companion to Applied Regression*, 3rd Edition. Sage Publications.

### Class DataCamp Site

There is a class DataCamp site which students may utilize for free to improve their skills with certain applications in R. I have sent each of you an invitation which will give you access to the DataCamp site for the entire semester. Each active assignment provides skills relevant to that week's material and is specified in the class schedule below. Each short course is about 4 hours in length, making each possible to accomplish within a week. If students encounter difficulties with R, I strongly recommend they utilize this resource.

# FAQs

**? How will communication be handled?**

! Important announcements will be posted to the seminar Canvas site. You may reach me via email. Office hours will be held virtually. Feel free to drop in during those hours or make an appointment via email. I will make an effort to respond to all communication within 24 hours. However, be advised that I do not respond to emails that are sent late at night, usually past 6:00pm. If you require an answer quickly, send your email during normal business hours.

**? Quarantine and Illness?**

! During the semester, you may be required to quarantine to avoid the risk of infection to others. If you have not tested positive but are ill or have been exposed to someone who is ill, please follow the Covid-19 Exposure Decision Tree for reporting your illness. During the quarantine or isolation period you may feel completely well, ill but able to work as usual, or too ill to work until you recover. Unless you are too ill to work, you should be able to complete your remote work while in quarantine. If you are ill and unable to do course work this will be treated similarly to any student illness. We have asked all faculty to be lenient and understanding when setting work deadlines or expecting students to finish work, and so you should be able to catch up with any work that you miss while in quarantine or isolation.

**? What if we go Remote?**

! There are contingency plans for all courses, including this course, to go fully remote if needed. I will release those plans to Canvas, and to you all via email, if and when needed.

## Grading Scheme

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|---|---|
| 25% | Annotated Bibliography |
| 10% | Weekly Conference Papers |
| 20% | Homework Assignments |
| 20% | Midterm Exam |
| 25% | Final Exam |

Grades will follow the standard scale: A = 100-90; B = 89-80; C = 79-70, D = 69-60, F = $< 50$.

## Learning Objectives

- Students will demonstrate methodological literacy to analyze to international political phenomena.
- Students will use oral communication to demonstrate knowledge and to make cogent arguments in international affairs.
- Students will demonstrate proficiency in written communication to increase knowledge and develop cogent arguments in international affairs.
- Students will demonstrate the relationship between science and technology and international affairs.

## Midterm and Final Exam

Students will complete a take home midterm and final exam to be distributed by the professor. Exams will primarily test student's critical thinking skills and/or proficiency in statistical analysis. All exams when applicable are to be analyzed using the R programming language for statistical analysis and all code is to be submitted in R Markdown files in .html format. Students will have two weeks to complete each exam.

## Annotated Bibliography

Students must email to me by start of class during Week 5 a research question which they will investigate over the length of the semester. This research topic is to be chosen in close consultation with the professor. Students will develop an extensive annotated bibliography demonstrating their research progress. The bibliography must contain references to professional, peer reviewed, articles, books, chapters, or edited volumes that are not listed as part of the required or recommended reading on this syllabus. While there is no officially approved number of sources that the bibliography must contain, it must demonstrate substantial research effort outside of the seminar on the part of the student. For guidelines on properly formatting an annotated bibliography, please see: `https://guides.library.cornell.edu/annotatedbibliography`.

## Weekly Conference Papers

"Those who know that they are profound strive for clarity. Those who would like to seem profound to the crowd strive for obscurity. For the crowd believes that if it cannot see to the bottom of something it must be profound." – Nietzsche

One of the most important skills you will cultivate as a graduate student is to write in a professional manner. To facilitate this skill, one of you will be required to write and present a response to a the required readings each week which is to be no more than 5 pages, standard margins, double spaced, TNR 12-point font. This paper should critically engage with the reading in a way that demonstrates not simply a summarizing of the material, but your analytical ability. This means synthesizing multiple readings to find common themes, or even divergent debates; in-depth criticism discussing logical, methodological, and analytical flaws; and most importantly, development of your own original voice as a scholar. When it is your week to write such a paper you will distribute it <u>no later</u> than 12:00 noon the day before the seminar to give the professor and your fellow students sufficient time to read and evaluate your response to the reading. This process will repeat until everyone has presented a paper, after which the process will begin (in a random order) again if necessary.

Those students not presenting should develop their own critical responses to each conference paper. These responses should be in the form of questions or critical comments, and do not need to be submitted, or written down. One student chosen each week will serve as the discussant for each paper, with the professor serving as the chair of the discussion. Each presenting student will have ten minutes to present their paper at the start of class. The discussant will then have 5 minutes to provide critical feedback on the paper. Other students will then have 5 minutes to ask the original presenter any questions.

## Homework Assignments

There will be five homework assignments to be completed during the semester. Students will have one week to complete each homework assignment. Directions for each assignment will be distributed on Canvas. All homework is to be completed individually in .html format using R Markdown only. Assignments submitted in other formats (besides Python or STATA, if approved) will not be accepted.

## Make-up Policy

Since this is a hybrid course, and students are informed of due dates well in advance, make-up assignments and exams will not be allowed unless a student is ill with COVID, in which case make-ups will be handled on an individual basis.

## Diversity and Inclusivity Statement

The Institute does not discriminate against individuals on the basis of race, color, religion, sex, national origin, age, disability, sexual orientation, gender identity, or veteran status in the administration of admissions policies, educational policies, employment policies, or any other Institute governed programs and activities. The Institute's equal opportunity and non-discrimination policy applies to every member of the Institute community. The Institute's affirmative action program, Title IX program, and related policies are developed in compliance with applicable law. Pursuant to Title IX, the Institute does not discriminate on the basis of sex in its education programs and activities. As such, the Institute does not tolerate any kind of gender-based discrimination or harassment, which includes sexual violence, sexual harassment, and gender-based harassment. Inquiries concerning the Institute's application of or compliance with Title IX may be directed to the Title IX Co-ordinator, Burns Newsome, burnsnewsome@gatech.edu, 404-385-5151. Additionally, inquiries concerning the application of applicable federal laws, statutes, and regulations (such as Title VI, Title IX, and Section 504) may be directed to the U.S. Department of Education's Office of Civil Rights at `www2.ed.gov/ocr`.

## Accommodations for Students with Disabilities

Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, students must register with the Office of Disability Services at Suite 123, Smithgall Student Services Building, 353 Ferst Drive, 404-894-2563 (Voice); 404-894-1664 (TDD). For more information on Georgia Tech's policy on working with students with disabilities, please see review the Office of Disability Service's web page at `https://policies.ncsu.edu/regulation/reg-02-20-01/`. The Office of Disability Services collaborates with students, faculty, and staff to create a campus environment that is usable, equitable, sustainable and inclusive of all members of the Georgia Tech community. Disability as an aspect of diversity that is integral to society and Georgia Tech. If students encounter academic, physical, technological, or other barriers on campus, the Disability Services team is available to collaboratively find creative solutions and implement reasonable accommodations.

## Academic Integrity

Academic dishonesty in the form of cheating or plagiarism will not be tolerated. In brief, plagiarism is defined, for the purposes of this class, as: copying, borrowing, or appropriating another person's work and presenting it as your own in a paper or oral presentation, deliberately or by accident. Acts of plagiarism will be reported in accordance with the Honor Code. In order to avoid being charged with plagiarism, if you use the words, ideas, phrasing, charts, graphs, or data of another person or from published material, then you must either: 1) use quotation marks around the words and cite the source, or 2) paraphrase or summarize acceptably using your own words and cite the source. The plagiarism policy is not restricted to books, but also applies to video and audio content, websites, blogs, wiki's, and podcasts. Plagiarism includes putting your name on a group project to which you have minimally contributed. For information on Georgia Tech's Academic Honor Code, please visit `http://www.catalog.gatech.edu/policies/honor-code/` or `http://www.catalog.gatech.edu/rules/18/`. Any student suspected of cheating or plagiarizing on a assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations. The student will also receive a grade of zero on the assignment at the professor's discretion.

## Class Schedule

### MODULE 1: The Quest for Knowledge

| Week 1 | What to Expect in Graduate School |
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REQUIRED READING

DesJardins, M. (1994). How to Succeed in Graduate School: a Guide for Students and Advisors: Part I of II. *XRDS: Crossroads, The ACM Magazine for Students*, 1(2), 3-9.

Achen, C. (2014). Why Do We Need Diversity in the Political Methodology Society? Online at `https://thepoliticalmethodologist.com/2014/04/30/we-dont-just-teach-statistics-we-teach-students/`

Chowdhury, R. (2014). Diversity and Political Methodology: A Graduate Student's Perspective. Online at `https://thepoliticalmethodologist.com/2014/05/09/diversity-and-political-methodology-a-graduate-students-p`

Jones, H.M. and Box-Steffensmeier, J. (2014). Implicit Bias and Why It Matters to the Field of Political Methodology. Online at `https://thepoliticalmethodologist.com/2014/03/31/implicit-bias-and-why-it-matters-to-the-field-of-politica`

Duck of Minerva. The Tradeoffs of Getting to Graduate School in Political Science. Online at `https://duckofminerva.com/2012/03/getting-to-graduate-school-in-political.html`

Potter, B., Allen, N. & Taussig, T. "Thinking About a Policy Orientated Ph.D. in International Relations?" Online at `https://warontherocks.com/2017/10/thinking-about-a-policy-oriented-phd-in-international-rel`

Weeks, G. (2006). Facing Failure: The Use (and Abuse) of Rejection in Political Science. *PS: Political Science & Politics*, 39(4), 879-882.

Schwartz, M. A. (2008). The Importance of Stupidity in Scientific Research. *Journal of Cell Science*, 121(11), 1771-1771.

Deconinck, K. (2014). Trust Me, I'm a Doctor: A PhD Survival Guide. `https://www.econstor.eu/bitstream/10419/126492/1/800967682.pdf`.

Skills Development: Introduction to R, R, Markdown, Tidyverse, and ggplot2

DataCamp Courses for Review: R Programming, Importing and Cleaning Data with R, Data Manipulation with R, Data Visualization with R

Homework #1 Assigned

RECOMMENDED READING

Benesh, S. C. (2001). The key to a successful prospectus: consult an advisor, early and often. *Political Science & Politics*, 34(4), 853-854.

Fox, R. L. (2001). Developing the dissertation prospectus. *PS, Political Science & Politics*, 34(4), 849.

Wuffle, A. (2006). Uncle Wuffle's advice on job talks. *PS: Political Science & Politics*, 39(4), 883-886.

May, P. J. (2001). Constructing the prospectus. *PS, Political Science & Politics*, 34(4), 843.

Farrar-Myers, V. A. (2001). The "rights" of passage. *PS, Political Science & Politics*, 34(4), 845.

Harman, J. D. (1991). Running the Good Race, Part 1*: High Anxiety: Some Lessons for Graduate Students Entering the Profession. *PS: Political Science & Politics*, 24(3), 535-539.

Andersen, K. (2001). Faculty roles and student projects. *PS, Political Science & Politics*, 34(4), 847.

Wasby, S. L. (2001). Introduction: Advisors and the dissertation proposal. *PS, Political Science & Politics*, 34(4), 841.

Ryan, J. J., & Breuning, M. (1994). Twisting arms and holding hands: MA students and conference participation. *PS: Political Science & Politics*, 27(2), 256-259.

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| Week 2 | Reading Across the Discipline | **REQUIRED READING** |

Pennycook, G., Cheyne, J. A., Barr, N., Koehler, D. J., & Fugelsang, J. A. (2015). On the Reception and Detection of Pseudo-Profound Bullshit. *Judgment and Decision Making*, 10(6), 549-563.

Frankfurt, H. G. (2009). On Bullshit. Princeton University Press.

Sagan, C. (2007). The Fine Art of Baloney Detection. Paranormal Claims: A Critical Analysis, Ch 1.

Dawkins, R. (1998). Postmodernism Disrobed. *Nature*, 394(6689), 141.

Rubin, A. (2016) "How to Read a Scientific Paper". `https://www.sciencemag.org/careers/2016/01/how-read-scientific-paper`

Pain, E. (2016) "How to (Seriously) Read a Scientific Paper" `https://www.sciencemag.org/careers/2016/03/how-seriously-read-scientific-paper`

Skills Development: Manipulating data in `R`, reading and creating summary statistic tables, understanding and critiquing quantitative data

DataCamp Courses for Review: R Programming, Importing and Cleaning Data with R, Data Manipulation with R, Data Visualization with R

**RECOMMENDED READING**

Pennycook, G., Fugelsang, J. A., & Koehler, D. J. (2015). Everyday Consequences of Analytic Thinking. *Current Directions in Psychological Science*, 24(6), 425-432.

Tetlock, P. E. (2017). Expert Political Judgment: How Good is It? How can we Know?. Princeton University Press.

Tetlock, P. E., & Gardner, D. (2016). Superforecasting: The Art and Science of Prediction. Random House.

Sokal, A. D. (1996). A Physicist Experiments with Cultural Studies. *Lingua Franca*, 6(4), 62-64.

Harris, S. R. (2013). How to Critique Journal Articles in the Social Sciences. SAGE Publications.

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| Week 3 | The Components of the Research Process | Chalmers Ch. 14-15 |

King, Keohane, and Verba, Ch. 1

Freedman, D. A. (1991). Statistical Models and Shoe Leather. *Sociological Methodology*, 291-313.

Sutton, R. I., & Staw, B. M. (1995). What Theory is Not. *Administrative Science Quarterly*, 371-384.

Skills Development: Exploratory Data Analysis. Correlational analysis, Examining common datasets in International Relations and Comparative Politics

DataCamp Courses for Review: R Programming, Importing and Cleaning Data with R, Data Manipulation with R, Data Visualization with R

RECOMMENDED READING

Whetten, D. A. (1989). What Constitutes a Theoretical Contribution?. *Academy of Management Review*, 14(4), 490-495.

Freedman, D. A. (2008). On Types of Scientific Inquiry: The Role of Qualitative Reasoning. The Oxford Handbook of Political Methodology, 300-318.

Dunning, T. (2010). Design-based Inference: Beyond the Pitfalls of Regression Analysis?. Rethinking Social Inquiry: Diverse Tools, Shared Standards, 273-311.

Mahoney, J., & Goertz, G. (2006). A tale of two cultures: Contrasting quantitative and qualitative research. *Political Analysis*, 14(3), 227-249.

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| Week 4 | Philosophy of Science I | REQUIRED READING |

Chalmers Chs. 1-4

Lebow, R. N. (2011). Philosophy and International Relations. *International Affairs*, 87(5), 1219-1228.

Arendt, H. (1981). The Life of the Mind. Houghton Mifflin Harcourt. Chapter I: Appearance. Available at https://antilogicalism.files.wordpress.com/2017/07/life-of-the-mind.pdf

Skills Development: Understanding measurement, latent variables

DataCamp Courses for Review: R Programming, Importing and Cleaning Data with R, Data Manipulation with R, Data Visualization with R

Homework # 2 Assigned

ADDITIONAL READING

Jackson, P. T. (2016). The Conduct of Inquiry in International Relations: Philosophy of Science and its Implications for the Study of World Politics. Routledge. Ch. 1-2 Canvas

Fearon, J. D. (1991). Counterfactuals and Hypothesis Testing in Political Science. *World Politics*, 43(2), 169-195.

Ward, M. D. (2016). Can we Predict Politics? Toward what End?. *Journal of Global Security Studies*, 1(1), 80-91.

Levy, J. S. (1997). Prospect Theory, Rational Choice, and International Relations. *International Studies Quarterly*, 41(1), 87-112.

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| Week 5 | Philosophy of Science II | **REQUIRED READING** |

Chalmers Chs. 5-7

Lake, D. A. (2013). Theory is Dead, Long Live Theory: The End of the Great Debates and the Rise of Eclecticism in International Relations. *European Journal of International Relations*, 19(3), 567-587.

Tilly, C. (2001). Mechanisms in Political Processes. *Annual Review of Political Science*, 4(1), 21-41.

Mayntz, R. (2004). Mechanisms in the Analysis of Social Macro-Phenomena. *Philosophy of the Social Sciences*, 34(2), 237-259.

DataCamp Courses for Review: R Programming, Importing and Cleaning Data with R, Data Manipulation with R, Data Visualization with R

Skills Development: Quantitatively evaluating theories

ADDITIONAL READING

Gerring, J. (2008). The Mechanismic Worldview: Thinking Inside the Box. *British Journal of Political Science*, 38(1), 161-179.

Lichbach, M. I., & Zuckerman, A. S. (2009). Comparative Politics: Rationality, Culture, and Structure. Cambridge University Press. Chs. 4-6

Coleman, J (1994). Metatheory: Explanation in Social Science. In `Foundations of Social Theory` Ch.1 Canvas

Lichbach, M. I., & Zuckerman, A. S. (2009). Comparative Politics: Rationality, Culture, and Structure. Cambridge University Press. Ch. 1-3

Clarke, K. A., & Primo, D. M. (2012). A Model Discipline: Political Science and the Logic of Representations. Oxford University Press.

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| Week 6 | Paradigms | **REQUIRED READING** |

Chalmers Ch. 8-10

Almond, G. A., & Genco, S. J. (1977). Clouds, Clocks, and the Study of Politics. *World Politics*, 29(4), 489-522.

Lake, D. A. (2011). Why "isms" are Evil: Theory, Epistemology, and Academic Sects as Impediments to Understanding and Progress. International Studies Quarterly, 55(2), 465-480.

Nau, H. R. (2011). No Alternative to "isms". International Studies Quarterly, 55(2), 487-491.

Mearsheimer, J. J., & Walt, S. M. (2013). Leaving Theory Behind: Why Simplistic Hypothesis Testing is Bad for International Relations. European Journal of International Relations, 19(3), 427-457.

Healy, K. (2017). Fuck Nuance. *Sociological Theory*, 35(2), 118-127.

DataCamp Courses for Review: R Programming, Importing and Cleaning Data with R, Data Manipulation with R, Data Visualization with R

Skills Development: Evaluating the veracity of evidence

Homework # 3 Assigned

ADDITIONAL READING

Jackson, P. T. (2016). The Conduct of Inquiry in International Relations: Philosophy of Science and its Implications for the Study of World Politics. Routledge. Ch. 3

Gurr, T. R. (2015). Why Men Rebel. Routledge. Chs. 1-2. Canvas

Fearon, J. D., & Laitin, D. D. (2003). Ethnicity, Insurgency, and Civil War. *American Political Science Review*, 97(1), 75-90.

Collier, P., & Hoeffler, A. (2004). Greed and Grievance in Civil War. *Oxford Economic Papers*, 56(4), 563-595.

Cederman, L. E., Wimmer, A., & Min, B. (2010). Why do Ethnic Groups Rebel? New Data and Analysis. *World Politics*, 62(1), 87-119.

Cederman, L. E., Weidmann, N. B., & Gleditsch, K. S. (2011). Horizontal Inequalities and Ethnonationalist Civil War: A Global Comparison. *American Political Science Review*, 105(3), 478-495.

## MODULE 2: Quantitative Discovery

| Week 7 | Intro to Probability Theory | Gill, J. (2006). Essential Mathematics for Political and Social Research. Cambridge: Cambridge University Press. Ch. 7 Probability Theory and Ch. 8 Random Variables |
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| | | Matthews, R. (2000). Storks Deliver Babies (p= 0.008). *Teaching Statistics*, 22(2), 36-38. |
| | | Cohen, J. (1994). The Earth is Round (p<. 05). *American Psychologist*, 49(12), 997. |
| | | Dinas, E., Matakos, K., Xefteris, D., & Hangartner, D. (2019). Waking up the Golden Dawn: Does Exposure to the Refugee Crisis Increase Support for Extreme-Right Parties?. *Political Analysis*, 27(2), 244-254. |
| | | Skills Development: Understanding probability, simple statistical tests in R, more plots in ggplot2, understanding data visualization |
| | | DataCamp Courses for Review: Probability Distributions with R, Data Visualization with R |
| | | Midterm Exam Assigned |
| Week 8 | Least Squares Regression I: Measurement | King, Keohane, and Verba Ch. 2 |
| | | Munck, G. L., & Verkuilen, J. (2002). Conceptualizing and Measuring Democracy: Evaluating Alternative Indices. *Comparative Political Studies*, 35(1), 5-34. |
| | | Alesina, A., & Ferrara, E. L. (2005). Ethnic Diversity and Economic Performance. *Journal of Economic Literature*, 43(3), 762-800. |
| | | Chandra, K., & Wilkinson, S. (2008). Measuring the Effect of "Ethnicity". *Comparative Political Studies*, 41(4-5), 515-563. |
| | | Cederman, L. E., & Girardin, L. (2007). Beyond Fractionalization: Mapping Ethnicity onto Nationalist Insurgencies. *American Political Science Review*, 101(1), 173-185. |
| | | Skills Development: More datasets, Latent variables and factor analysis, understanding the consequences of variance |
| | | DataCamp Courses for Review: Statistics Fundamentals with R, Statistical Inference with R |
| Week 9 | Least Squares Regression II: Developing a Model | Lewis-Beck (2015) Applied Regression. |

Koerth, M., Bronner, L. & Mithani, J. (2020) "Why It's So Freaking Hard To Make A Good COVID-19 Model" FiveThirtyEight `https://fivethirtyeight.com/features/why-its-so-freaking-hard-to-make-a-good-covid-19-model/`

King, Keohane, and Verba Ch. 3

Achen, C. H. (2005). Let's Put Garbage-Can Regressions and Garbage-Can Probits where they Belong. *Conflict Management and Peace Science*, 22(4), 327-339.

Achen, C. H. (2002). Toward a new political methodology: Microfoundations and ART. Annual review of political science, 5(1), 423-450.

Lee Ray, J. (2003). Explaining Interstate Conflict and War: What Should be Controlled for?. *Conflict Management and Peace Science*, 20(2), 1-31.

Clarke, K. A. (2005). The Phantom Menace: Omitted Variable Bias in Econometric Research. *Conflict Management and Peace Science*, 22(4), 341-352.

Skills Development: Building, interpreting, and visualizing a regression model in R

DataCamp Courses for Review: Statistics Fundamentals with R, Statistical Inference with R

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| Week 10 | OLS III: Relaxing Assumptions I | King, Keohane, and Verba Ch. 4-5 |
| | | Gujrati Chs. 10-11 |
| | | Skills Development: Diagnosing violations of regression assumptions |
| | | Homework # 4 Assigned |
| | | DataCamp Courses for Review: Statistics Fundamentals with R, Statistical Inference with R |
| Week 11 | OLS IV: Relaxing Assumptions II | King, Keohane, and Verba Ch. 6 |
| | | Gujrati Ch. 12-13 |
| | | Skills Development: Fixing threats to inference, heteroskedasticity-corrected standard errors, Fixed and Random Effects Models, Clustered Standard Errors |
| | | DataCamp Courses for Review: Statistics Fundamentals with R, Statistical Inference with R |
| Week 12 | MLE I: The Normal Model | Long Ch. 1-2 |
| | | Eliason Ch. 1-6 |
| | | Skills Development: `glm` and `zelig` in R. |

| Week 13 | MLE II: Binary Choice Models | Long Ch. 3-4 |
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Fearon, J. D., & Laitin, D. D. (2003). Ethnicity, Insurgency, and Civil War. *American Political Science Review*, 97(1), 75-90.

Skills Development: Logit and Probit Regression

Homework # 5 Assigned

DataCamp Courses for Review: Statistics Fundamentals with R, Statistical Inference with R

| Week 14 | MLE III: Count Models | Long Ch. 8 |
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Heldt, B. (2018). Atrocity Crimes as a Disease: A Statistical Approach to Early Detection.

Daxecker, U. E. (2012). The cost of exposing cheating: International election monitoring, fraud, and post-election violence in Africa. Journal of Peace Research, 49(4), 503-516.

Skills Development: Poisson and Negative Binomial Regression

DataCamp Courses for Review: Statistics Fundamentals with R, Statistical Inference with R

Final Exam Assigned

Annotated Bibliography Due

| Week 15 | MLE IV: Less Common MLE Models | No Class Meeting |
|---|---|---|
| | | Long Ch. 5-7 |
| Week 16 | FINAL EXAM | Take home exam. To be submitted to Canvas. |