

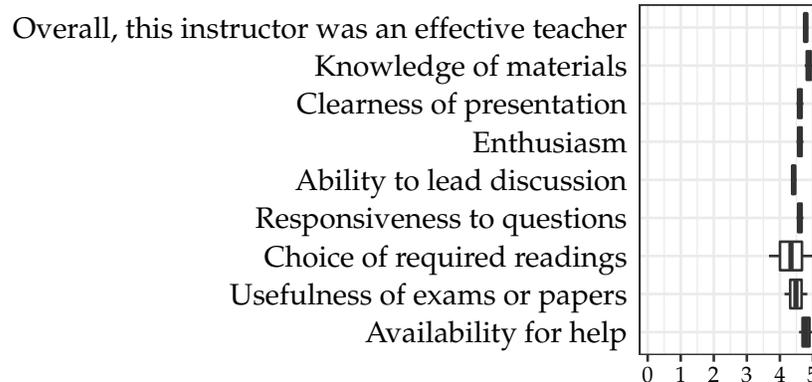
At WashU, I have taught International Conflict Management and Resolution and The Scientific Study of Civil War, both upper division undergraduate courses. At UNC, I served as instructor of record for Quantitative Research in Political Science once and the lab for Advanced Topics in Political Data Science twice. I also served as a teaching assistant for International Relations and World Politics four times and Race, Innocence, and the End of the Death Penalty one time. In this teaching portfolio, I include:

- Quantitative summary of student evaluations of teaching
- Illustrative written responses from student evaluations of teaching
- PS3090 The Scientific Study of Civil War, Spring 2020
  - Syllabus
- PS3171 International Conflict Management and Resolution, Fall 2019
  - Syllabus
- POLI281 Quantitative Research in Political Science, Spring 2019
  - Syllabus
- Lab for POLI787 Advanced Topics in Political Data Science, Fall 2017
  - Syllabus

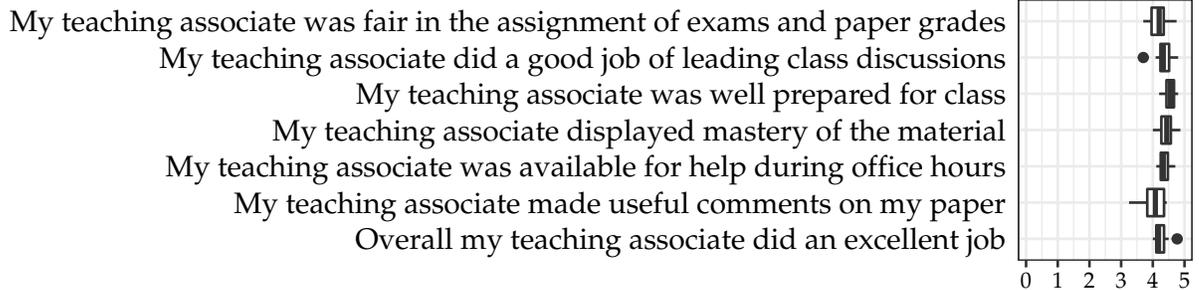
## Quantitative summary of student evaluations of teaching

Quantitative evaluations for POLI281 Quantitative Research in Political Science, PS3171 International Conflict Management and Resolution, and PS3090 The Scientific Study of Civil War are not included in these summaries because each course used a different evaluation instrument. Full student evaluations of teaching for all of my teaching, as well as peer teaching evaluations and sample student work, are available upon request.

Below, I summarize my student evaluations for the two lab sections of Advanced Topics in Political Data Science I taught as instructor of record at UNC:



Below I summarize my student evaluations for the five courses I served as a teaching assistant while at UNC:



## Illustrative written responses from student evaluations of teaching

### PS3090 The Scientific Study of Civil War

- Among my 5 classes, Rob handled the transition the best. He was clear about expectations and schedule for the rest of the semester. I also appreciated that he still held office hours consistently over Zoom. More generally, Rob is an incredibly good instructor. He is passionate about the subject, which really comes through in his lectures. I can tell he is genuinely interested in helping us learn think about concepts critically. Im not kidding when I say he is one of the best instructor I have had in the Political Science department.
- Professor Williams made himself very available to students in office hours. He was always willing to meet one-on-one with students, which really helped me understand the concepts better. Professor Williams also was incredible in providing a good synopsis of all the readings and theories. He broke down each concept well. Also, I appreciated how he provided a background on regression tables and reading academic literature. This helped me understand the methodology and studies throughout the semester. This background was super helpful.
- Great job at delivering the course material and explaining it in a way that made it easy to comprehend. You made this class way more engaging, interesting, and comprehensive than most political science classes I have taken thus far.
- One thing that I appreciated was that Professor Williams was always very affirming in responding to our comments. When we would answer a question, even if it was slightly wrong, he wouldn't make a big deal about it. He would say something like "not quite." This contributed to an environment where I felt motivated to participate.

### PS3171 International Conflict Management and Resolution

- Rob is an awesome professor and is what this political science department has been missing for a long time. If you take a class with him you will not be disappointed.
- This class is a good introduction to important topics in international relations and civil wars. Rob makes the information digestible while challenging us to consider the topics in a new light.

- During some classes he would set up debates to allow us to discuss the real applications of the readings. This was a big focus throughout the class: not just learning the content but being able to apply it in the real world.
- You can learn some really interesting things and you do leave the class feeling as though your expertise in a specific area of international affairs has significantly improved — the material is diverse and multifaceted so as to facilitate critical thinking.
- the group project and response memo were fun assignments and i enjoyed reading in depth and feeling knowledgeable about a subject. for the group project I very much so was able to draw upon class materials and knowledge to answer a difficult question about world conflict.
- Dr. Williams went over the readings in class incredibly; I always understood it afterwards even if I hadn't before, and even if I had, I left the class feeling as though I had a more nuanced and robust perspective.
- I like how in each class we went through the details of the readings and considered their context in the class as a whole.
- with a difficult political science topic there were a lot of times where religious conflicts or ethnic conflicts couldve been poorly explained, but Professor Williams always defined situations well and let the scientific process take place. students could certainly feel uncomfortable reading some of the articles or discussing certain policies but in the classroom Professor Williams let students know how important Peace politics is and made whatever possible discomfort existed seem worth it for the educational gains.

### **POLI281 Quantitative Research in Political Science**

- Fantastic teacher. Clearly knows what he's talking about and made very clear from the first day there would be no judgment for anyone who was felt they were not good at math or coding. Always makes sure to help students when we need it. Overall does a great job.
- The instructor is very nice and had helped me in office hours every week. He is willing to go back and re-explain a concept if needed and he is understanding that the students in his class are starting at different levels. He also understands that the material is hard and is very willing to help students and answer questions.
- He is always willing to meet with someone or create office hours. He is also really understanding and will help a student even if they understand nothing. He is available and ready to provide aid without judgement.
- He is so kind and understanding. He has helped me get through this semester. He was considerate of my time and wanted to see me succeed.
- Rob is very well organized and an excellent lecturer. He makes himself available to students and offers guidance that applies not only to this class, but to student's futures. He provides a lot of helpful assistance.

### **Lab for POLI787 Advanced Topics in Political Data Science**

- Honestly, I don't think Rob's lab could have been improved. Rob has inspired me to pursue methodology throughout graduate school, making a discipline that can seem incredibly

exclusionary feel more open. This lab has — by far — been the most useful lab course we've taken. The prior labs in our methods sequence should be modeled more like Rob's.

- Rob's class was the most useful lab I've taken throughout my methods sequence. This was a product of two distinct things. First, Rob took the initiative and put in the extra effort to produce html R markdown scripts for each class that summarized his lectures and explanations of material from lab in addition to providing example code. These files will be a vital resources that I will no doubt return to throughout my graduate career and beyond. They were thorough and provided full explanation. It's an unrealistic expectation to believe that in one class period a student can fully grasp the concepts presented to her. By creating a long-lasting, detailed resource that students can return to, Rob has ensured that our learning process will extend beyond this single class. Second, Rob was extremely generous with his time outside of lab and lecture. Beginning your first foray into research is very daunting. Rob has constantly made himself available during office hours and on his own time to help students work through methods difficulties for coursework and their own research. Rob's commitment to teaching and helping his students was, by far, the greatest strength of this course.
- Rob really knows what he's doing and presents the information in a clear, concise manner. Course materials are so well put together that even after the lab, they're easy to reference and understand.
- One of Rob's strengths was teaching us how to work through our own problems with R.
- Rob is an excellent instructor. The amount of preparatory work he puts in for each week is evident. He is also patient and thorough in answering all student questions.

# PS 3090: The Scientific Study of Civil War

Instructor: Rob Williams

Department of Political Science

Washington University in St. Louis

Spring 2020

Meetings: Monday, Wednesday 10:00-11:30, Seigle Hall 004

## Contact Information

Email: [rob.williams@wustl.edu](mailto:rob.williams@wustl.edu)

Office: Seigle Hall 251

## Office Hours

Monday 2:00-3:30, Tuesday 2:00-3:30

And by appointment

## 1 Course Description

Civil wars have become the most prevalent form of violent conflict in contemporary times. What conditions are sufficiently dire – or inspiring – to make someone take up arms and risk their life as part of a rebel group? Throughout the semester we will discuss, analyze, and critique a variety of arguments about the onset, duration, and termination of intrastate wars. This course will provide you with extensive exposure to tools used to study of civil wars around the world, including statistical analyses and bargaining models. The course will push you to not only assess the arguments being made, but also require you to understand and evaluate the methods through which theories are tested. By the end of the course, you will be able to understand the scientific method of theory building, be familiar with various forms of empirical analysis, and be able to both understand and challenge existing theories of war and peace. While this course is focused on large- $N$  cross-national quantitative studies of civil wars, we will frequently use current and historical examples to supplement our analysis of theories of conflict.

### 1.1 Changes to the Syllabus

I reserve the right to make changes to this syllabus at any point in the semester. I will inform you in class and via email and an updated syllabus will be posted on Canvas.

## 2 Course Requirements and Grading

Your grade for the course will be determined by performance in four areas: class participation, response memo, midterm exam, and research project.

### 2.1 Grades

Final grades for the course will be based on the following scale. I reserve the right to make adjustments to individual grades based on overall performance in the course and/or extenuating circumstances. There will be *no* extra credit provided.

- |             |             |             |                  |
|-------------|-------------|-------------|------------------|
| • A: 93-100 | • B: 83-86  | • C: 73-76  | • D: 63-66       |
| • A-: 90-92 | • B-: 80-82 | • C-: 70-72 | • D-: 60-62      |
| • B+: 87-89 | • C+: 77-79 | • D+: 67-69 | • F: 59 or below |

## 2.2 Class Participation (10%)

The majority of the class will be devoted to discussions of scholarly readings. The class will proceed in a seminar format, with as little lecturing as possible. You are expected to have read the assigned material when we discuss it in class. I (and you) will ask questions, and the class will be responsible for providing the answers. Students should feel free to ask questions and debate the topics at hand. There are no wrong questions, and you are strongly encouraged to participate even if you found the readings difficult or problematic. Part of what I want you to practice is the art of deciphering analytical work, so I do not expect you to understand everything you will read on the syllabus. The participation grade evaluation will be based on the quantity *and quality* of comments and questions and demonstration of knowledge of the course material. Attendance *per se* will not be evaluated, but if you are not in class you cannot participate. We will also break into active learning sessions several times throughout the semester to apply the skills you are acquiring to the study of a particular puzzle in international conflict management or resolution. Your enthusiasm and attention in these sessions directly impacts your participation grade.

## 2.3 Response Memo (10%)

At some point during the semester, you will write one 500 word (minimum) response memo on the readings for a given class meeting. This memo should (briefly) summarize the readings, before spending the majority of its space evaluating their content. Are the arguments in each article persuasive? Why or why not? How do the articles connect to broader themes within the course? Examples can be found on Canvas under the Files tab. **The memo may be written for any class meeting that has multiple readings and is due via Canvas before the start of that class.**

## 2.4 Midterm Exam (20%)

The midterm exam will require you to step back and process the material in the course beyond the individual contributions of each reading. Mere demonstration of knowledge of the material will be regarded as an average performance. To excel on the exam you will have to demonstrate an ability to synthesize and analyze the material relevant to the questions on the test.

## 2.5 Research Project (60%)

During the semester you will be responsible for writing a 2,500 word research paper that explains the onset, evolution, and (potentially) resolution of a civil war. This will be a semester-long project, so choose carefully, as you'll be researching and writing about this conflict for the next several months. To minimize the natural tendency to procrastinate and provide you ample opportunities to incorporate feedback, we will break up this project into several components.

### 2.5.1 Project Proposal (5%)

Choose the conflict you will focus on, provide a brief background on the conflict, and discuss why this conflict is interesting to you. **Proposals are due by 5pm, Friday, January 31.**

### 2.5.2 Annotated Bibliography (5%)

Identify five academic sources that you plan to use for your paper. They do not have to be works of political science; disciplines such as history, anthropology, and sociology can provide valuable information for improving our understanding of conflict as political scientists. For each source, write a paragraph summarizing the source and explain how you will use it to support your argument. **Annotated bibliographies are due by 5pm, Friday, February 14.**

### 2.5.3 Introduction and Thesis Statement (10%)

The introduction to your paper is important because it tells the reader what you will be arguing, why they should believe your argument, and why they should care about it. Writing a captivating yet succinct thesis statement is an essential skill for all writers to develop. Your introduction should provide a short background on the conflict that you are studying and what we can learn from it before leading into your argument. **Introductions are due by 5pm, Friday, February 21.**

### 2.5.4 Rough Draft (10%)

All papers or books you will read in this class underwent multiple drafts and edits before publication. Learning to implement feedback you receive on your work is an important skill. I do not expect your papers to be finished at this point, but outlines are insufficient. A good goal is to have 3/4 of your paper written. **Rough drafts are due by 5pm, Friday, March 20.**

### 2.5.5 Final Paper (30%)

Your final paper should explain how the conflict began, why it unfolded the way it did, and why it has or has not ended. Your discussion of why the conflict evolved the way it did should touch on topics from the course including whether there was widespread violence against civilians and if so, what forms it took and which actors committed it, if the conflict witnessed third-party military intervention, whether rebels attempted to establish institutions to regulate interactions with the civilian population, and what strategies each actor employed. Feel free to focus on one or two of these aspects if they are more dominant in the conflict. **Final papers are due by 5pm, Friday, May 1.**

## 3 Expectations and Resources

### 3.1 Late Assignment Policy

There will be no late work accepted without prior approval. This requirement *may* be waived in extraordinary circumstances.

### 3.2 Communication, Office Hours, Questions About Grades

I am very happy to meet with students outside of class time. Whether it be to discuss concerns about the course or questions about the material, please feel free to stop by Seigle Hall 251 during my office hours (Monday 2:00-3:30, Tuesday 2:00-3:30). If you are unable to meet during my office hours, please email me to set up a time to talk. Email is the best way to reach me. Please note that

email is only for brief communications. If you have longer questions, come to my office hours or schedule a meeting with me.

If you disagree with the grade you earned on an assignment, you must submit a memo (electronically, via email) outlining the specific reasons why you believe the grade should be changed. I will then re-grade the assignment. Your grade may go up, stay the same, or even go down, so please consider whether you truly think the original grade was unreasonable. **I will not answer any questions about grades until 48 hours after I have returned a graded assignment.**

### 3.3 Technology Policy

We will often engage in group activities where being able to conduct research in class will be beneficial to you. Occasionally we will also work on elements of the research project in class. As such, **please bring your laptop or tablet with you every class.** If you do not have a device, please contact me as soon as possible.

### 3.4 Students with Disabilities

Students with disabilities needing academic accommodation should (1) contact **Disability Resources** and (2) send an email to me indicating the need for accommodation and what type during the first week of class.

### 3.5 Academic Integrity

According to Washington University's **Undergraduate Student Academic Integrity Policy**, "In all academic work, the ideas and contributions of others must be appropriately acknowledged, and work that is presented as original must be, in fact, original." I treat all suspected instances of academic dishonesty very seriously.

### 3.6 Mental Health Services

Life at WashU can be complicated and challenging. You might feel overwhelmed with work, experience anxiety or depression, or struggle with relationships or family responsibilities. **Mental Health Services** provides *confidential* support for students who are struggling with mental health and emotional challenges. Please do not hesitate to contact MHS for assistance — getting help is a smart and good thing to do.

## 4 Course Materials

All readings are available electronically via library e-journals and e-resources databases.

## 5 Schedule

All readings are due the day of class listed. In-class activities are denoted **in bold**.

## 5.1 The Basics

### Week 1: Introduction

- 1/13
  - Introduction
- 1/15
  - The Fog of War

### Week 2: The Bargaining Model of War

- 1/22
  - Fearon, James D. 1995. "Rationalist Explanations for War." *International Organization* 49(03): 379-414.
  - Wagner, R. Harrison. 2000. "Bargaining and War." *American Journal of Political Science* 44(3): 469-484.

### Week 3: Civil War Onset

- 1/27
  - Fearon, James D. and David D. Laitin. 2003. "Ethnicity, Insurgency, and Civil War." *American Political Science Review* 97(1): 75-90.
  - Collier, Paul and Anke Hoeffler. 2004. "Greed and Grievance in Civil War." *Oxford Economic Papers* 56(4): 563-595.
- 1/29
  - Sambanis, Nicholas. 2004. "What is Civil War? Conceptual and Empirical Complexities of an Operational Definition." *Journal of Conflict Resolution* 48(6): 814-858.

## 5.2 Causes of Civil War

### Week 4: Ethnic Conflict

- 2/3
  - Sambanis, Nicholas. 2001. "Do Ethnic and Nonethnic Civil Wars Have the Same Causes?" *Journal of Conflict Resolution* 45(3): 259-282.
- 2/5
  - Cederman, Lars-Erik, Andreas Wimmer, and Brian Min. 2010. "Why do ethnic groups rebel? New data and analysis." *World Politics* 62(1): 87-119.

### Week 5: Relational Explanations

- 2/10
  - Stewart, Frances. 2008. "Horizontal Inequalities and Conflict: An Introduction and Some Hypotheses." In *Horizontal Inequalities and Conflict: Understanding Group Violence in Multiethnic Societies, Conflict, Inequality and Ethnicity*, ed. Frances Stewart. New York: Palgrave Macmillan, 3-24.
  - Cederman, Lars-Erik, Nils B. Weidmann, and Nils-Christian Bormann. 2015. "Triangulating Horizontal Inequality: Toward Improved Conflict Analysis." *Journal of Peace Research* 52(6): 806-821.
- 2/12
  - Walter, Barbara F. 2006. "Building Reputation: Why Governments Fight Some Separatists but not Others." *American Journal of Political Science* 50(2): 313-330.

- Cunningham, Kathleen Gallagher. 2013. “Actor Fragmentation and Civil War Bargaining: How Internal Divisions Generate Civil Conflict.” *American Journal of Political Science* 57(3): 659-672.

## 5.3 Conflict Dynamics

### Week 6: Duration and Recurrence

- 2/17
  - Walter, Barbara F. 1997. “The Critical Barrier to Civil War Settlement.” *International Organization* 51(3): 335-364.
- 2/19
  - Walter, Barbara F. 2004. “Does Conflict Beget Conflict? Explaining Recurring Civil War.” *Journal of Peace Research* 41(3): 371-388.
  - Daly, Sarah Zukerman. 2012. “Organizational Legacies of Violence Conditions Favoring Insurgency Onset in Colombia.” *Journal of Peace Research* 49(3): 473-491.

### Week 7: Severity and Intensity

- 2/24
  - Lacina, Bethany. 2006. “Explaining the Severity of Civil Wars.” *Journal of Conflict Resolution* 50(2): 276-289.
  - Zaryab, Iqbal. 2006. “Health and Human Security: The Public Health Impact of Violent Conflict.” *International Studies Quarterly* 50(3): 631-649.
- 2/26
  - Valentino, Benjamin, Paul Huth, and Dylan Balch-Lindsay. 2004. “Draining the Sea: Mass Killing and Guerrilla Warfare.” *International Organization* 58(2): 375-407.
  - Schwartz, Rachel A. and Scott Straus. 2018. “What Drives Violence against Civilians in Civil War? Evidence from Guatemala’s Conflict Archives.” *Journal of Peace Research* 55(2): 222-235.

### Week 8: Terrorism and Civil War

- 3/2
  - Thomas, Jakana. 2014. “Rewarding bad behavior: How governments respond to terrorism in civil war.” *American Journal of Political Science* 58(4): 804-818.
  - Fortna, Virginia Page. 2015. “Do Terrorists Win? Rebels’ Use of Terrorism and Civil War Outcomes.” *International Organization* 69(3): 519-556.
- 3/4
  - Exam

## 5.4 International Dimensions of Civil War

### Week 10: Diffusion and Mediation

- 3/16
  - Buhaug, Halvard, and Kristian Skrede Gleditsch. 2008. “Contagion or Confusion? Why Conflicts Cluster in Space.” *International Studies Quarterly* 52(2): 215-233.
  - Idean Salehyan. 2008. “No Shelter Here: Rebel Sanctuaries and International Conflict.” *Journal of Politics* 70(1): 54- 66.

- 3/18
  - Svensson, Isaac. 2009. “Who Brings which Peace?” *Journal of Conflict Resolution* 53(3): 446-469.
  - Clayton, Govinda 2009. “SRelative rebel strength and the onset and outcome of civil war mediation.” *Journal of Peace Research* 50(5): 609-622.

### **Week 11: Foreign Intervention**

- 3/23
  - David Cunningham. 2010. “Blocking resolution: How external states can prolong civil wars.” *Journal of Peace Research* 47(2): 115-127.
- 3/25
  - Koch, Michael T. and Patricia Sullivan. 2010. “Should I Stay or Should I Go Now? Partisanship, Approval, and the Duration of Major Power Democratic Military Interventions.” *The Journal of Politics* 72(3): 616-629.

## **5.5 Rebel Groups as Organizations**

### **Week 12: Recruitment and Internal Structure**

- 3/30
  - Weinstein, Jeremy M. 2005. “Resources and the Information Problem in Rebel Recruitment.” *Journal of Conflict Resolution* 49(4): 598-624.
  - Thomas, Jakana L., and Reed M. Wood. 2018. “The social origins of female combatants.” *Conflict Management and Peace Science* 35(3): 215-232.
- 4/1
  - Sanín, Francisco Gutiérrez and Elisabeth Jean Wood. 2014. “Ideology in Civil War: Instrumental Adoption and Beyond.” *Journal of Peace Research* 51(2): 213-226.
  - Hoover Green, Amelia. 2016. “The commander’s dilemma: Creating and controlling armed group violence.” *Journal of Peace Research* 53(5): 619–632

### **Week 13: Civilian Targeting**

- 4/6
  - **No class meeting**
- 4/8
  - Eck, Kristine, and Lisa Hultman. 2007. “One-Sided Violence Against Civilians in War: Insights from New Fatality Data.” *Journal of Peace Research* 44(2): 233-246.
  - Balcells, Laia. 2010. “Rivalry and Revenge: Violence against Civilians in Conventional Civil Wars.” *International Studies Quarterly* 54(2): 291-313.

### **Week 14: Rebel-Civilian Interactions**

- 4/13
  - Cohen, Dara Kay. 2013. “Explaining Rape during Civil War: Cross-National Evidence (1980-2009).” *American Political Science Review* 107(3): 461-477.
  - Chu, Tiffany S. and Jessica Maves Braithwaite. 2018. “The Effect of Sexual Violence on Negotiated Outcomes in Civil Conflicts.” *Conflict Management and Peace Science* 35(3): 233-247.
- 4/15

- Arjona, Ana. 2014. "Wartime Institutions: A Research Agenda." *Journal of Conflict Resolution* 58(8): 1360-1389
- Stewart, Megan. "Civil War as State-Making: Strategic Governance in Civil War." *International Organization* 2018. 72. 205-226.

### **Week 15: Rebel Legitimacy**

- 4/20
  - Heger, Lindsay L., and Danielle F. Jung. 2017. "Negotiating with rebels: The effect of rebel service provision on conflict negotiations." *Journal of Conflict Resolution* 61(6): 1203-1229.
- 4/22
  - **Simulation**

# PS 3171: International Conflict Management & Resolution

Instructor: Rob Williams  
 Department of Political Science  
 Washington University in St. Louis  
 Fall 2019

Meetings: Tuesday, Thursday 10:00-11:30, Seigle Hall 002

## Contact Information

Email: [rob.williams@wustl.edu](mailto:rob.williams@wustl.edu)  
 Office: Seigle Hall 251

## Office Hours

Tuesday 2:00-3:30, Wednesday 2:00-3:30  
 And by appointment

## 1 Course Description

This course is an advanced seminar on the management and resolution of international and civil conflict. How and why do states decide to resolve their conflicts, or the conflicts of others? When are conflict and war amenable to the opportunity for management? What determines intervention and mediation strategies for third parties, and why do attempts at conflict resolution so frequently fail? We will engage with theoretical and empirical investigations into the strategic incentives of governments, rebels, and other non-state actors to lay down weapons and commit to peace. The emphasis will be on developing students' analytical capacity to examine arguments and using these skills to analyze real world conflicts in light of our theoretical understanding of conflict resolution.<sup>1</sup>

### 1.1 Changes to the Syllabus

I reserve the right to make changes to this syllabus at any point in the semester. If the syllabus changes, I will inform you in class and via email. An updated syllabus will be posted on Canvas.

## 2 Course Requirements and Grading

Your grade for the course will be determined by performance in six areas: class participation, response memo, midterm exam, research paper, group project, and project presentation.

### 2.1 Grades

Final grades for the course will be based on the following scale. I reserve the right to make adjustments to individual grades based on overall performance in the course and/or extenuating circumstances. There will be *no* extra credit provided.

- |             |             |             |                  |
|-------------|-------------|-------------|------------------|
| • A: 93-100 | • B: 83-86  | • C: 73-76  | • D: 63-66       |
| • A-: 90-92 | • B-: 80-82 | • C-: 70-72 | • D-: 60-62      |
| • B+: 87-89 | • C+: 77-79 | • D+: 67-69 | • F: 59 or below |

<sup>1</sup>This syllabus draws on material from [Mark J.C. Crescenzi](#) and [Lindsay Reid](#).

## 2.2 Course Grade Breakdown

The proportion of each assignment as part of your overall grade is as follows:

- Class Participation 10%
- Response Memo 10%
- Midterm Exam 20%
- Research Paper 30%
- Group Project 20%
- Group Presentation 10%

## 2.3 Class Participation (10%)

The majority of the class will be devoted to discussions of scholarly readings. The class will proceed in a seminar format, with as little lecturing as possible. You are expected to have read the assigned material when we discuss it in class. I (and you) will ask questions, and the class will be responsible for providing the answers. Students should feel free to ask questions and debate the topics at hand. There are no wrong questions, and you are strongly encouraged to participate even if you found the readings difficult or problematic. Part of what I want you to practice is the art of deciphering analytical work, so I do not expect you to understand everything you will read on the syllabus. The participation grade evaluation will be based on the quantity *and quality* of comments and questions and demonstration of knowledge of the course material. Attendance *per se* will not be evaluated, but if you are not in class you cannot participate. We will also break into active learning sessions several times throughout the semester to apply the skills you are acquiring to the study of a particular puzzle in international conflict management or resolution. Your enthusiasm and attention in these sessions directly impacts your participation grade.

## 2.4 Response Memo (10%)

At some point during the semester, you will write a 500 word response memo on the readings for a given week. This memo should (briefly) summarize the readings, before spending the majority of its space evaluating their content. Are the arguments in each article persuasive? Why or why not? How do the articles connect to broader themes within the course? Examples can be found on Canvas under the Files tab. **The memo may be written for any class meeting between week 5 and week 12 that has multiple readings.**

## 2.5 Midterm Exam (20%)

In addition to the paper and project, there will be a midterm exam. The exams will require you to step back and process the material in the course beyond the individual contributions of each reading. Mere demonstration of knowledge of the material will be regarded as an average performance. To excel on the exam you will have to demonstrate an ability to synthesize and analyze the material relevant to the questions on the test.

## 2.6 Research Paper (30%)

During the semester you will be responsible for writing a 5,000 word research paper that addresses a topic in conjunction with the course readings and additional research. I will give you a list of possible questions/topics that you could address in your paper. You should not feel constrained by these prompts. If you have a different idea for a paper that addresses the relevant readings, contact me and we can work something out. **Papers are due by 5pm, Friday, December 13.**

## 2.7 Group Project (20%)

In the second half of the semester, we will take the theoretical and empirical work that we've been learning and apply it to ongoing global events associated with conflict, conflict resolution, and/or conflict management. For this assignment you will form into small groups and operate as a foreign policy advisory team. Each team will identify an ongoing case within the scope of our course, and use the theories and knowledge we have gathered throughout the semester to help the class understand what happened (or is happening), what types of conflict management approaches have been implemented (if any), and why have these approaches succeeded or failed to resolve the conflict. Your team will develop a policy brief, complete with an executive summary and policy recommendations.

## 2.8 Group Presentation (10%)

In addition to the policy brief, your team will make a presentation to the class summarizing your main findings and recommendations. The format of this presentation will be announced later in the semester.

# 3 Expectations and Resources

## 3.1 Communication, Office Hours, Questions About Grades

I am very happy to meet with students outside of class time. Whether it be to discuss concerns about the course or questions about the material, please feel free to stop by Seigle Hall 251 during my office hours (Tuesday 2:00-3:30, Wednesday 2:00-3:30). If you are unable to meet during my office hours, please email me to set up a time to talk. Email is the best way to reach me. Please note that email is only for brief communications. If you have longer questions, come to my office hours or schedule a meeting with me.

**If you disagree with the grade you earned on an assignment, you must submit a memo (hard-copy, in-person) outlining the specific reasons why you believe the grade should be changed. I will then re-grade the assignment. Your grade may go up, stay the same, or even go down, so please consider whether you truly think the original grade was unreasonable. I will not answer any questions about grades until 48 hours after I have returned a graded assignment.**

## 3.2 Students with Disabilities

Students with disabilities needing academic accommodation should (1) contact [Disability Resources](#) and (2) send an email to me indicating the need for accommodation and what type during the first week of class.

## 3.3 Academic Integrity

According to Washington University's [Undergraduate Student Academic Integrity Policy](#), "In all academic work, the ideas and contributions of others must be appropriately acknowledged, and work that is presented as original must be, in fact, original." I treat all suspected instances of academic dishonesty very seriously.

### 3.4 Collaborative Group Membership

As you all know by now, group projects pose a unique set of challenges, a.k.a. collective action problems. To assist you in managing the group throughout the semester, we will form these groups early, and write up group contracts that specify the expectations and requirements of the group. At the end of the semester you will complete self and peer evaluations of your group's performance, and I will take these evaluations into account when grading group work. If problems within the group do arise, I encourage you first to discuss them openly and honestly among yourselves to see if some resolution can be found. If problems persist, please contact me.

### 3.5 Mental Health Services

Life at WashU can be complicated and challenging. You might feel overwhelmed with work, experience anxiety or depression, or struggle with relationships or family responsibilities. **Mental Health Services** provides *confidential* support for students who are struggling with mental health and emotional challenges. Please do not hesitate to contact MHS for assistance — getting help is a smart and good thing to do.

## 4 Course Materials

The following books are available in the University Bookstore. All other readings are available electronically via link in this syllabus or library e-journals and e-resources databases.

- Gourevich, Philip. 1999. *We Wish to Inform You that Tomorrow We Will Be Killed with Our Families: Stories from Rwanda*. New York: Picador.
- Reiter, Dan. 2009. *How Wars End*. Princeton: Princeton University Press.
- Fortna, V. Page. 2008. *Does Peacekeeping Work? Shaping Belligerents' Choices after Civil War*. Princeton: Princeton University Press.

These books will be referred to by their authors' last names throughout the rest of this syllabus.

## 5 Schedule

All readings are due the day of class listed. In-class activities are denoted **in bold**.

### 5.1 Why We Should Care About Conflict Resolution

#### Week 1: Why We Study Conflict Resolution

- 8/27
  - Introduction
- 8/29
  - **No class meeting (APSA)**

#### Week 2: What do we Really Know?

- 9/3
  - Gourevitch
  - **Gourevitch Frontline Interview** (optional)

- 9/5
  - Davenport, Christian and Allan C. Stam. 2009. “What Really Happened in Rwanda.” *Pacific Standard*.
  - Galtung, Johan. 1969. “Violence, Peace, and Peace Research.” *Journal of Peace Research* 6(3): 167-191.

## 5.2 Understanding Conflict Resolution in Interstate War

### Week 3: How Wars End

- 9/10
  - Regan, Patrick M. 2014. “Bringing peace back in: Presidential address to the Peace Science Society, 2013.” *Conflict Management and Peace Science* 31(4): 345-356.
- 9/12
  - Reiter, Ch. 1-3

### Week 4: From Theory to Empirics

- 9/17:
  - Reiter, Ch. 4-6
- 9/19:
  - Reiter, Ch. 9, 10

## 5.3 Conflict Management and Resolution in Intrastate War

### Week 4: Barriers to Settlement in Conflict

- 9/24
  - Bercovitch, Jacob and Gerald Schneider. 2000. “Who Mediates? The Political Economy of International Conflict Management.” *Journal of Peace Research* 37(2): 145-165.
  - Owsiak, Andrew. 2014. “Conflict Management Trajectories in Militarized Interstate Disputes: A Conceptual Framework and Theoretical Foundations.” *International Studies Review* 16: 50-78.
- 9/26
  - Walter, Barbara. 2009. “Bargaining Failures and Civil War.” *Annual Review of Political Science* 12: 243-261.
  - Melin, Molly. 2014. “Commitment Problems: Understanding Variation in the Frequency of International Conflict Management Efforts.” *International Negotiation* 20: 221-256
  - Fazal, Tanisha. 2018. “Religionist Rebels & the Sovereignty of the Divine.” *Daedalus* 147(1): 25-35

### Week 5: Military Intervention

- 10/1
  - Evans, Gareth and Mohamed Sahnoun. 2002. “The Responsibility to Protect.” *Foreign Affairs*, Nov/Dec.
  - Gent, Stephen. 2008. “Going in When it Counts: Military Intervention and the Outcome of Civil Conflicts.” *International Studies Quarterly* 52(4): 713-735.
- 10/3

- Gent, Stephen. 2007. “Strange Bedfellows: The Strategic Dynamics of Major Power Military Intervention.” *Journal of Politics* 69(4): 1089-1102.
- Biddle, Stephen. 2018. “Building Security Forces & Stabilizing Nations: The Problem of Agency.” *Daedalus* 146(4): 126-138.

### **Week 6: Taking Stock**

- 10/8
  - Prepare for in-class group project work
- 10/10
  - **Exam**

### **Week 7: Mediation**

- 10/17
  - Isak Svensson. 2007. “Mediation with Muscles or Minds? Exploring Power Mediators and Pure Mediators in Civil Wars.” *International Negotiation* 12: 229-248.
  - Nilsson, Desirée. 2008. “Partial Peace: Rebel Groups Inside and Outside of Civil War Settlements.” *Journal of Peace Research* 45(4):479-495.

## **5.4 Keeping the Peace**

### **Week 8: Conflict Resolution and Maintaining the Peace**

- 10/22
  - Hartzell, Caroline, Mathew Hoddie, and Donald Rothchild. 2001. “Stabilizing the Peace After Civil War: An Investigation of Some Key Variables.” *International Organization* 55 (1):183-208.
  - Collier, Paul, Anke Hoeffler, and Mans Soderbom. 2008. “Post-Conflict Risks.” *Journal of Peace Research* 45(4):461-478.
- 10/24
  - Downes, Alexander. 2004. “The Problem with Negotiated Settlements to Ethnic Civil Wars.” *Security Studies* 13 (4):230-279.
  - Mattes, Michaela and Burcu Savun. 2009. “Fostering Peace After Civil War: Commitment Problems and Agreement Design.” *International Studies Quarterly* 53: 737-759

### **Week 9: Peacekeeping and Conflict Resolution Success**

- 10/29
  - Fortna, Ch. 1-3
- 10/31
  - Fortna, Ch. 4-7

### **Week 10: The International Community’s Track Record**

- 11/5
  - Gowan, Richard and Stephen John Stedman. 2018. “The United Nations & Civil Wars.” *Daedalus* 147(1): 171-84
  - Guehenno, Jean-Marie. 2018. “The International Regime for Treating Civil War, 1988-2017.” *Daedalus* 147(1): 185-96
- 11/7
  - **No class meeting (Peace Science)**

- Tepperman, Jonathan. 2002. "Truth and Consequences." *Foreign Affairs* 81 (2): 128-145.

## 5.5 What Success Looks Like

### Week 11: The Price of Peace

- 11/12
  - Reid, Lindsay. 2017. "Finding a Peace that Lasts: Mediator Leverage and the Durable Resolution of Civil Wars." *Journal of Conflict Resolution* 61(7): 1401-1431.
  - Beardsley, Kyle. 2008. "Agreement without Peace? International Mediation and Time Inconsistency Problems." *American Journal of Political Science* 52(4): 723-740.
- 11/14
  - Sikkink, Kathryn and Carrie Booth Walling. 2007. "The Impact of Human Rights Trials in Latin America." *Journal of Peace Research* 44 (4):427-445.
  - Leebaw, Bronwyn Anne. 2008. "The Irreconcilable Goals of Transitional Justice." *Human Rights Quarterly* 30(1): 95-118.
  - Prorok, Alyssa K. 2017. "The (In)compatibility of Peace and Justice? The International Criminal Court and Civil Conflict Termination." *International Organization* 71(2): 213-243.

### Week 12: Gender and Political Representation

- 11/19
  - Hartzell, Caroline A. and Matthew Hoddie. 2015. "The Art of the Possible: Power Sharing and Post-Civil War Democracy." *World Politics* 67(1): 37-71.
  - Matanock, Alia M. 2017. "Bullets for Ballots: Electoral Participation Provisions and Enduring Peace after Civil Conflict." *International Security* 41(4): 93-132.
- 11/21
  - Hughes, Melanie M. and Aili Mari. 2015. "Civil War and Trajectories of Change in Women's Political Representation in Africa, 1985-2010." *Social Forces* 93(4): 1513-1540.
  - Shair-Rosenfield, Sarah and Reed M. Wood. 2017. "Governing Well after War: How Improving Female Representation Prolongs Post-conflict Peace." *The Journal of Politics* 79(3): 995-1009.

## 5.6 Applying Theories to History

### Week 13: Getting Hands On

- 11/26
  - **Post-Conflict Simulation**

### Week 14: What Have we Learned?

- 12/3
  - **Group Presentations**
- 12/5
  - **Group Presentations**
  - **Project due**

# Poli 281: Quantitative Research in Political Science

Instructor: Rob Williams

Department of Political Science

University of North Carolina at Chapel Hill

Spring 2019

Meetings: Tuesday, Thursday 11:00-12:15, Mitchell 205

## Contact Information

Office: 459 Hamilton Hall

Email: [jrw@live.unc.edu](mailto:jrw@live.unc.edu)

## Office Hours

Tuesday 1:00-2:30, Wednesday 12:30-2:00

And by appointment

## 1 COURSE DESCRIPTION

This course is designed to achieve three objectives: (1) introduce you to research and quantitative analysis in political science, (2) help you become critical consumers of quantitative analysis used in political and policy-oriented reporting, and (3) give you the ability to answer questions of social scientific importance using data. Throughout the course, we'll discuss the complexities of generating good research designs, starting with how to ask interesting questions and how to measure concepts of interest to social scientists. We'll discuss the challenges and limitations of gathering good data to test our theories and learn various statistical tools that can be used to evaluate them. Throughout the course, we'll use what we've learned to think critically about the use and abuse of data by analysts, reporters, politicians, and policy advocates. As such, not only will you be learning to do your own analysis this semester, but also learning to evaluate such information when it's presented in the media. This course fulfills the Quantitative Intensive (QI) requirement and counts as a research methods course for completing the Political Science major. It is a prerequisite for Poli 381: Data in Politics II which will be offered in future semesters.

### 1.1 CHANGES TO THE SYLLABUS

I reserve the right to make changes to this syllabus at any point in the semester. If the syllabus changes, I will inform you in class and via email. An updated syllabus will also be posted on Sakai.

## 2 COURSE REQUIREMENTS AND GRADING

Your grade for the course will be determined by performance in five areas: class participation, problem sets, DataCamp exercises, exams, and a critical analysis project.

### 2.1 GRADES

Final grades for the course will be based on the following scale. I reserve the right to make adjustments to individual grades based on overall performance in the course and/or extenuating circumstances. There will be NO extra credit provided.

### 2.2 COURSE GRADE BREAKDOWN

The proportion of each assignment as part of your overall grade is as follows:

- A: 93-100
- A-: 90-92
- B+: 87-89
- B: 83-86
- B-: 80-82
- C+: 77-79
- C: 73-76
- C: 73-76
- C-: 70-72
- D+: 67-69
- D-: 60-62
- F: 59 or below

- Participation and In-Class Work: 15%
- Problem Sets: 15%
- DataCamp: 5%
- Exam One: 10%
- Exam Two: 20%
- Critical Analysis Project: 35%
  - Proposal: 5%
  - Preliminary Analysis: 5%
  - Presentation: 10%
  - Paper: 15%

### 2.3 PARTICIPATION AND IN-CLASS WORK (15%)

Class time will be divided between lecture and in-class activities. The way you are going to learn best, especially when it comes to working with statistical software, is through practice. Active involvement in activities is absolutely crucial to success in this class — not to mention, an easy way to boost your participation grade. We will be doing a lot of in-class work, both individually and in groups. While attendance is not graded directly, absences will hurt your grade as you cannot earn participation points if you are not in class. If you know you are going to be absent for an excused reason, email me before class. When your absence is excused, you can make up the in-class work for credit. When your absence is unexcused, you cannot make the in-class work up and you will receive a zero. **In-class work will be due before the start of the next class meeting.**

### 2.4 PROBLEM SETS (15%)

Homework assignments will be assigned throughout the semester. The problem sets will be posted to Sakai, and **due electronically on Sakai before the start of class on the due date.** Late homework will be subject to a 10% penalty each additional day it is late. **Late homework will no longer be accepted after the answer key is posted to Sakai.**

### 2.5 DATACAMP (5%)

We will be using DataCamp for the Classroom, an online learning platform for data science, to help get you up to speed with R. You will be able to access DataCamp through our course's Sakai page. **DataCamp assignments must be completed before the start of class on the due date.**

### 2.6 CRITICAL ANALYSIS PROJECT (35%)

The research project is a primary focus of this course and, as such, makes up just over a third of the overall grade. This project will allow you to directly apply the lessons from this course to a political issue or question that you care about. You will be assigned to a group of 3-4 students and work together to select a relevant political issue or question, theorize about some factors that might explain that issue or help answer the question, choose a (provided) data set appropriate for the question, and analyze the data to see whether your expectations are supported. The project and overall distribution of points are divided into four parts:

- **Project Proposal (5%):** Each group must turn in a two-page, double-spaced paper proposal by February 14. This proposal should include a brief description of the issue or question about

public opinion you plan to examine. Make sure to address why this topic is interesting to you and/or important within political science. This proposal should include an initial description of your research question, theory, and hypotheses.

- **Preliminary Analysis (5%):** Each group must turn in a preliminary data analysis, which includes the key statistics used to test your hypotheses, by April 16. This assignment, totaling approximately two or three double-spaced pages, requires a brief description of the data used, a brief explanation of the statistical methods you used, the relevant statistical outputs you computed, and an indication of whether and why the outputs support or oppose your paper's hypotheses.
- **Presentation (10%):** At the end of the semester, each group will give a PowerPoint presentation about its research on April 29. Each presentation should be approximately 12-15 minutes, and time will be left for questions and answers after each group presents.
- **Paper (15%):** The final research paper is due on April 29 before presentations begin. This paper should be approximately 10 pages, double-spaced, not counting any tables, figures, or the bibliography.

Each member of the group will receive approximately the same grade on all parts of the research project; I expect each member, in turn, to make an equal contribution throughout the process. You will be asked to evaluate your group members and yourself at each stage of the process and the evaluations provided will have an impact on your grade. So, make sure that do you part for the project. We will discuss expectations for each section in more detail throughout the semester.

## 2.7 EXAMS (30%)

There will be two midterm exams; the first worth 10% and the second worth 20% of your final grade. The first will be on February 28 and the second will be on April 18. Note that this is not the final exam slot. We will be using the final exam slot for group presentations. The format of each exam will be discussed in class before the exam.

## 2.8 UNEXCUSED ABSENCES AND EXAMS

You are required to be present for all scheduled exams. The only allowable exception to this policy is a documented emergency. If at all possible you should contact the instructor before the exam to discuss the emergency, provide documentation, and schedule the make-up.

# 3 EXPECTATIONS

## 3.1 COMMUNICATION, OFFICE HOURS, QUESTIONS ABOUT GRADES

I am very happy to meet with students outside of class time. Whether it be to discuss concerns about the course or questions about the material, please feel free to stop by 459 Hamilton Hall during my office hours (Tuesday 1:00-2:30, Wednesday 12:30-2:00). If you are unable to meet during my office hours please email me to set up a time to talk. Email is the best way to reach me. Please note that email is only for brief communications. If you have longer questions, come to my office hours or schedule a meeting with me. **I will not answer any questions about grades until 48 hours after I have returned a graded assignment.**

## 3.2 CLASS DISCUSSIONS

All conversation during class must be civil, reasoned, and respectful of others' opinions. An important component of this course is discussing ideas with, learning from, and collaborating with your peers. As such, I want to create an environment where you feel comfortable, confident, and excited about sharing your thoughts and applying what you have learned to issues you care about. I encourage students to challenge themselves to think about, voice, and debate new ideas, while maintaining norms of civil discourse. I know we are up to this challenge.

## 3.3 TECHNOLOGY USE

The use of cell phones or other mobile communication devices is prohibited during this class, without exception. Laptops, on the other hand, are required. We are going to be doing a lot of work on the computer, especially with statistical programming software. Please email or come talk to me if you do not have access to a laptop and we will find a solution. Please bring your laptop to every class.

## 3.4 STUDENTS WITH DISABILITIES

Students with disabilities needing academic accommodation should (1) contact the office of Learning Disabilities at UNC: <http://www.unc.edu/depts/lds/index.html> and (2) bring a letter to me indicating the need for accommodation and what type during the first week of class.

## 3.5 ACADEMIC INTEGRITY

According to UNC's Instrument of Student Judicial Governance, "It shall be the responsibility of every student enrolled at the University of North Carolina to support the principles of academic integrity and to refrain from all forms of academic dishonesty." Failure to abide by this policy may result in punitive action taken against the offending students. Consult the UNC Writing Center's handout on plagiarism (<http://writingcenter.unc.edu/handouts/plagiarism/>) to learn more on how to avoid academic dishonesty.

Programming is a skill that takes time and practice to develop. Whenever you encounter a new problem, you will have to grapple with it and reach an understanding of what it is asking before you can reach a solution. Discussing the problem with other people is permitted and even encouraged. When it comes time to actually write your code to solve the problem, all work must be your own. Do not copy anyone else's code, and do not share your code with others. Identifying plagiarized code is surprisingly easy, even after renaming variables or rearranging individual pieces of code. Some in-class work and the critical analysis project is collaborative, and collaborative writing of code is permitted. **All collaborative assignments will be clearly identified.**

## 3.6 HONOR CODE

All students participating in the class are assumed to be familiar with and adhering to the UNC Honor Code. I treat violations of the Honor Code seriously. More information is available at <http://instrument.unc.edu>.

### 3.7 COLLABORATIVE GROUP MEMBERSHIP

As explained above, students will work on the research project, including the presentation and final paper, as a group. Though time will be given in class for group members to work together on the various sections of the research project, you will still need to devote a substantial amount of time to the group project outside of class. I expect all members of the group to contribute equally to the project, and each component of the project should reflect contributions from each group member. In other words, do not simply divide up the components of the project among the members of the group. While collaborative work poses some challenges, the benefits you will gain from learning how to work together successfully as a team will serve you well in all facets of your life, from the classes you take in the future to the career you pursue after graduation.

When it comes to group work, two problems often occur: (1) one member of the group dominates the project, or (2) some members of the group “free ride” by relying on other group members to do their work for them. I will try my best to prevent both, by regularly checking in with groups about the status of their projects. If problems within the group do arise, I encourage you first to discuss them openly and honestly among yourselves to see if some resolution can be found. If problems persist, please see me.

## 4 COURSE MATERIALS

### 4.1 READING

There is one required book for this course, available in the UNC Bookstore. We rely heavily on this textbook so it is essential that you buy it.

- Imai, Kosuke. 2017. *Quantitative Social Science: An Introduction*. Princeton: Princeton University Press.

There will occasionally be readings assigned outside of the textbook. These will be posted on Sakai.

### 4.2 SOFTWARE

Much of the hands-on work we will do in this class requires us to use computers, so I ask that you bring your laptops to class each day. Specifically, we will make use of the R statistical computing environment to analyze data and create graphics over the course of the semester. RStudio is a popular editor that allows you to open, edit, and save R text files, making it much easier to work with R. I will use RStudio to demonstrate in class, and I recommend you download and use it as well. To access these programs:

- **R:** Download precompiled binary distributions at <http://cran.us.r-project.org>
- **RStudio:** Download RStudio Desktop at <http://www.rstudio.com/products/rstudio>

### 4.3 SUGGESTED MATERIALS & ADDITIONAL RESOURCES

The textbook has extensive online materials for learning to use R. There are also a number of free supplemental resources available through UNC that offer assistance:

- <http://qss.princeton.press/student-resources-for-quantitative-social-science>

- Monogan III, James E. 2015. *Political Analysis Using R*. New York: Springer.
- R Open Labs: <http://ropenlabs.web.unc.edu>

Additional help may be found with the Odum Institute's statistical consultants at the Research Hub on the second floor of Davis Library from 9am to 6pm, Monday through Friday.

## 5 SCHEDULE

Readings and assignments are due the date of class listed.

Date	Class Topic	Readings & Assignments
1/10	Introduction and overview	
1/15	Introduction to R	Imai Ch. 1
1/17	Theory building and testing	<b>DataCamp – Introduction to R</b>
1/22	Writing R scripts	<b>DataCamp – Working with RStudio</b>
1/24	Causality and descriptive statistics	Imai Ch. 2
1/29	Causality in R	<b>DataCamp – Intermediate R</b>
1/31	Measuring what you care about	Imai Ch. 3 pp. 75-107
2/5	Visualizing univariate data in R	<b>DataCamp – Introduction to Data</b>
2/7	Applied political science research	See handout on readings for 2/7
2/12	Visualizing bivariate data in R	<b>Problem set 1</b>
2/14	Cleaning data in R	<b>DataCamp – Importing &amp; Cleaning Data</b>
2/19	Prediction	Imai Ch. 4 pp. 123-160
2/21	Linear regression	<b>Problem set 2</b>
2/26	Linear regression in R	
2/28	<b>Exam</b>	<b>Research proposal due</b>
3/5	Regression with multiple predictors	Imai Ch. 4 pp. 161-182
3/7	Regression with conditional effects	Berliner et al., 2015
3/19	Introduction to probability	Imai Ch. 6 pp. 242-265
3/21	Probability distributions	Imai Ch. 6 pp. 277-306
3/26	Bayes' Rule	Imai Ch. 6 pp. 266-277
3/28	Project group work	<b>Problem set 3</b>
4/2	Null hypothesis significance testing	Imai Ch. 7 pp. 314-369
4/4	Hypothesis testing in R	Mitchell & Martin, 2018
4/9	Regression with uncertainty	Imai Ch. 7 pp. 370-389
4/11	Project group work	<b>Problem set 4</b>
4/16	Project group work	<b>Preliminary analysis due</b>
4/18	<b>Exam</b>	
4/23	Algorithms in the wild	<b>Problem set 5</b>
4/25	Reproducibility and replication	Aschwanden & Koerth-Baker, 2016
4/29	<b>Project presentations</b>	<b>Paper due</b>

## POLI891: Lab for Advanced Topics in Political Data Science

Instructor: Rob Williams

Department of Political Science

University of North Carolina at Chapel Hill

Fall 2018

Meetings: Thursday 3:30-4:45, Dey 307

### Contact Information

Office: 459 Hamilton Hall

Email: [jrw@live.unc.edu](mailto:jrw@live.unc.edu)

### Office Hours

Monday, Wednesday 12:30-2:00

And by appointment

This lab is designed to help you learn how to apply the methods you will cover in POLI787 Advanced Topics in Political Data Science. While the lecture will focus more on the theoretical background and technical nuances of the models, this lab is intended to help you learn how to use them in your own research. As such, it is primarily focused on implementations of these models in R. We will be working with many different R packages throughout the semester, and by the end of the course you will be familiar with many of the cutting edge tools being used in Political Science and related fields.

In lab sessions you will work through an HTML file and create a notebook containing the code to carry out that week's analysis. Each lab also has an individual exercise component that you must complete after the lab session. Your completed notebook, typeset in R Markdown or  $\text{\LaTeX}$ , is due by 5pm the Monday following the lab session.

I will post answer keys after labs are due. Because each key will contain thoroughly commented code, I will not be grading your labs. You will receive a check for making a good faith effort at completing the assignment. If you still have questions after looking at the key, please come by my office hours and we can discuss anything you are not clear on.

### Calendar with Topics.

<b>Week</b>	<b>Date</b>	<b>Topic</b>
Week 2	8/30	Multilevel Linear Models
Week 3	9/6	Multilevel Generalized Linear Models
Week 4	9/13	Multilevel Models for Correlated Data
Week 5	9/20	Multilevel Regression with Poststratification (MRP)
Week 6	9/27	Advanced R: Cluster & Parallel Computing
Week 7	10/4	Item Response Theory (IRT)
Week 8	10/11	Advanced R: Working with Strings
Week 9	10/18	Fall Break
Week 10	10/25	Structural Topic Models
Week 11	11/1	Advanced R: Performance and Optimization
Week 12	11/8	Advanced R: Webscraping (Rachel Porter)
Week 13	11/15	LASSO, Ridge, and Elastic Net Regularization
Week 14	11/21	Thanksgiving Break
Week 15	11/29	Latent Space Networks