# POLS 541 Stats of Conflict Spring 2016 Christopher K. Butler, Associate Professor

#### **Contact Information:**

**Class Meetings:** 

Lecture: Wednesdays

Web component: http://www.unm.edu/~ckbutler/StatsOfConflict

and Blackboard Learn at http://learn.unm.edu

**Instructor:** Chris Butler

Email: ckbutler at unm dot edu

Office: SSCO 2051

Office Hours: Tuesdays and Thursdays from 11 AM to 12 noon, Tuesdays from 1:30 PM to 3 PM,

and by appointment

#### Overview

#### Course Description

The scientific study of conflict is built on a foundation of statistics. From the Statistics of Deadly Quarrels (Richardson, 1950, based on his work going back to 1919) to geo-spatial analyses of conflict location, conflict at many levels is examined through statistical analysis. To fully appreciate this literature, students will be immersed in the data upon which it is based. We will read influential articles and engage in replication of the articles' statistical analyses. The course will be organized around levels of analysis (i.e., systemic, monadic, dyadic, directed-dyadic, conflict, N-adic, and spatial) and domain of conflict (i.e., interstate and intrastate). Students will have an opportunity to delve into one of these areas of conflict research, including writing a research paper using statistical analysis. (Students are expected to have successfully completed POLS 581 and be proficient in the use of Stata.)

## Readings

#### Required Articles

See course schedule in Table 4.

#### Required Books

Acock, Alan C. A Gentle Introduction to Stata. (Acock, 2014)

#### **Optional Books**

Levy, Jack S. and William R. Thompson. Causes of War. (Levy and Thompson, 2011) McLaughlin Mitchell, Sara and John A. Vasquez. Conflict, War, and Peace: An Introduction to Scientific Research. (McLaughlin Mitchell and Vasquez, 2013)

WikiBook on LATEX, available at http://en.wikibooks.org/wiki/LaTeX

### **Basic Policies**

- Completion: Grades of incomplete (I) will only be given in extraordinary circumstances.
- LATEX: Students are strongly encouraged to write their papers for this course in LATEX. Supplemental instruction will be given to make this feasible.
- **Extensions** will be given for the paper assignments. Students need only ask *prior* to the deadline and are expected to complete the assignment by their own revised deadline.
- **Make-up Policy:** If a student has a University-approved excuse for missing an examination AND if the instructor is notified PRIOR to the examination, arrangements for a make-up examination will be made. This policy is for exams only.
- **Department Computer Lab:** Undergraduate departmental honors students have the privilege of using the department's computer lab during business hours (8 AM 5 PM) when it is not reserved for another class. Politely ask the office staff to let you in. Abuse of this privilege will lead to its loss.
- Undergraduates taking the class for 496 credit will be graded on the same scale as graduate students. Note, however, that graduate students cannot receive final grades between D- and C-, inclusive. Graduate students earning an average final grade in this range will receive an F for the class.
- Americans with Disabilities Act &: Qualified students with disabilities needing appropriate academic adjustments should contact me as soon as possible to ensure your needs are met in a timely manner. Handouts are available in alternative accessible formats upon request.

## Learning Objectives

#### Students will demonstrate...

- 1. the capacity to conduct an original research design;
- 2. a firm understanding of research design and methods;
- 3. a thorough grasp of the major theories in the subfield;
- 4. a thorough grasp of the literature and experts in the subfield;
- 5. an ability to think critically in methodological terms;
- 6. an ability to think critically with respect to theory;
- 7. analytical writing that is clear and appropriate to the audience;
- 8. the ability to communicate orally in the field; and
- 9. the ability to answer questions effectively.

## Coursework and Grading

The coursework for this class is divided into three parts: **reading comprehension**, **lab assignments**, and **a research project**.

Reading comprehension (25%) of the assigned readings is essential *prior* to attending class. It is recommended that students take detailed notes regarding the readings. Reading comprehension will be evaluated via questioning during class. A list of broad questions that students should be able to answer regarding the assigned reading is provided as part of this syllabus; the list should be taken as *representative* of the types of questions students should be able to answer. Students can earn up to four levels per week for reading comprehension; see Table 1.

Reading comprehension assesses the following learning objectives: a firm understanding of research design and methods, a thorough grasp of the major theories in the subfield, a thorough grasp of the literature and experts in the subfield, an ability to think critically in methodological terms, an ability to think critically with respect to theory, the ability to communicate orally in the field, and the ability to answer questions effectively.

Lab assignments (25%) in class will be provide hands-on experience working with relevant data. Students are expected to start a log file (in plain text) at the beginning of each class period and create a Do-file showing a cleaner version of their work (including comments). Both files are to be emailed to the instructor at (or soon after) the end of class. Lab assignments will be evaluated via these files. Students can earn up to four levels per week from their lab assignments; see Table 1.

Lab assignments assess the following learning objectives: a firm understanding of research design and methods, a thorough grasp of the literature and experts in the subfield, an ability to think critically in methodological terms, an ability to think critically with respect to theory, and analytical writing that is clear and appropriate to the audience.

Table 1: Translation of Levels to Grades for Reading Comprehension and Labs

$\mathrm{Levels}^\dagger$	Grade	
0 to 7 levels	F	
8 to 12 levels	D-	
13 to 17 levels	D	
18 to 22 levels	D+	
23 to 27 levels	C-	
28 to 32 levels	$\mathbf{C}$	
33 to 37 levels	C+	
38 to 42 levels	В-	
43 to 47 levels	В	
48 to 52 levels	B+	
53 to 57 levels	A-	
58 to 62 levels	A	
63 to max levels	A+	

<sup>†-</sup> This table assumes 15 weeks of reading comprehension and 15 weeks of lab assignments. It is also subject to change.

- The research project (50%) will statistically examine some aspect of conflict as a dependent variable; it will build on existing literature and theory while also demonstrating some original contribution. "Conflict" is broadly defined here, from the traditional definition of war, to human-rights abuses (e.g., Butler, Gluch, and Mitchell, 2007), to non-violent protest (e.g., Chenoweth and Cunningham, 2013), to aspects of "positive peace" (Addams, 2007; Wright, 1942; King Jr, 1963; Galtung, 1969). It will be divided into phases due throughout the semester. Relevant phases (3–6) will then be revised as paper sections and synthesized into a final paper.
  - Phase 1. Proposal: In consultation with the instructor, students will generate a research question concerning some aspect of conflict as a dependent variable. The question may focus on the effect that an independent variable has on the conflict variable (such as "How does x affect y?") or be more general (such as "What explains variation in y?"). A proposal of 150–250 words will state the research question, provide hypotheses answering the research question, and addressing how the student intends to address the research question.
  - Phase 2. Data Availability: What data sets are available to address the research question? Download them and determine the following for each: What is the spatial and temporal domain? What is the unit of analysis? What are the ID variables? Which variables would you use from the data set in your research project? What other variables do you need to complete your research project? This phase assesses a firm understanding of research design and methods, an ability to think critically in methodological terms, and analytical writing that is clear and appropriate to the audience.
  - Phase 3. Literature Review: What does the existing literature say about your research question? What does the literature say explains your dependent variable? What are the main approaches/theories/camps within this literature? If you have a key independent variable in mind, what does the literature say about this variable? The literature review phase/section (including reference management) assesses the following learning objectives: a thorough grasp of the major theories in the subfield, a thorough grasp of the literature and experts in the subfield, an ability to think critically in methodological terms, an ability to think critically with respect to theory, and analytical writing that is clear and appropriate to the audience.
  - Phase 4. Theory: What is your theoretical argument? How does your theoretical argument connect with the existing literature? Optionally, what theoretical propositions are derived from your theoretical argument? The theory phase/section assesses the following learning objectives: the capacity to conduct an original research design, a thorough grasp of the major theories in the subfield, a thorough grasp of the literature and experts in the subfield, an ability to think critically with respect to theory, and analytical writing that is clear and appropriate to the audience.
  - Phase 5. Methods: What is your dependent variable and its unit of analysis? What estimation technique do you employ and why is it appropriate? What independent variables are you including? What hypotheses are you specifically testing? The methods phase/section assesses the following learning objectives: the capacity to conduct an original research design, a firm understanding of research design and methods, an ability to think critically in methodological terms, and analytical writing that is clear and appropriate to the audience.
  - Phase 6. Results: What are the formal results of your statistical testing? Are your hypotheses supported by the results? What are the implications of the results for your research question? The results phase/section assesses the following learning objectives: the capacity to conduct an original research design, an ability to think critically in methodological terms, an ability to think critically with respect to theory, and analytical writing that is clear and appropriate to the audience.

The final paper is a synthesis of the previous phases. The abstract is a revision of your proposal summarizing the paper, including the findings of the research. The introduction should present the research question, address why it's important, showcase the main findings, and set the stage for the remainder of the paper. The conclusion should recap the findings (including unsupported hypotheses), discuss the limitations of the research (including possible next steps for future research), and discuss the broader implications of the research. The final paper should be written using the following outline:

- Title page with abstract
- 1. Introduction
- 2. Literature Review
- 3. Theory
- 4. Methods
- 5. Results
- 6. Conclusion
- References
- Appendix (if appropriate)

The presentation is a further distillation of the entire research project. In 12-minute presentations using at most seven slides, students will present their research question, link to the most relevant literature, summarize their theory, state their (main) hypotheses, show their statistical results, and highlight their main conclusions. Extra slides for the question-and-answer period are recommended, along with a printed index of slides for easy access and navigation.

The research project will also be graded on a *leveling-up* system; see Table 2. Students can earn four levels for each phase (24 levels for phases). Each section of the paper (and the abstract) will be worth up to five levels (35 levels for the paper). The presentation is worth 15 levels (up to five each for the slides, the oral presentation itself, and handling questions). The overall research project will also be graded holistically by each learning objective (45 levels); these levels will be earned gradually over the semester so students will have a sense of progress and where they need to focus their effort to improve.

Table 2: Translation of Levels to Grades for the Research Project

Levels	Grade
0 to 7 levels	F
8 to 16 levels	D-
17 to 25 levels	D
26 to 34 levels	D+
35 to $43$ levels	C-
44 to 52 levels	$\mathbf{C}$
53 to 61 levels	C+
62 to 70 levels	В-
71 to 79 levels	В
80 to 88 levels	B+
89 to 97 levels	A-
98 to 106 levels	A
107 to max levels	A+

Table 3: Readings Organized by Level of Analysis and Type of Conflict

	Type of Conflict		
Level of DV	Interstate	Intrastate	
Systemic	Crescenzi and Enterline (1999)	Gleditsch (2008)	
Monadic	Quackenbush and Rudy (2009)	Hendrix and Salehyan (2012)	
Dyadic	Crescenzi (2007) Bennett and Stam (2000b)	Nilsson (2008)	
Directed- Dyadic	Bennett and Stam (2000b) Salehyan (2008)	Shellman, Hatfield, and Mills (2010)	
Group		Cederman, Gleditsch, and Buhaug (2013)	
Conflict	Bolks and Stoll (2003)	Cunningham (2006)	
N-adic	Poast (2010)		
Spatial	Ward and Gleditsch (2002)	Theisen, Holtermann, and Buhaug (2011)	

## Reading Comprehension Questions

These questions are representative of the types of questions students should be able to answer regarding the readings. Actual questions are likely to be more specific. Note that any of the questions calling for a "yes/no" answer has implied follow up questions.

#### **Getting Started**

• What was the main point of the reading?

#### Literature

- How does the reading relate to major theories in the subfield?
- How does the reading relate to similar literature?
- Who's work does the author most critique and/or build upon?

#### Theory

- What is the theoretical argument in the reading?
- Is the theoretical argument internally valid?
- What are other implications of the theoretical argument?

#### Bridging from Theory to Empirics

- Do the empirical measures relate appropriately to the theoretical concepts?
- Are the hypotheses consistent with the theoretical argument?

#### Methods

- What is the unit of analysis of the dependent variable?
- What is the temporal and spatial domain of the sample?
- Is the sample appropriate to the research question?
- How appropriate is the research design/estimation technique?
- Does the author's discussion of the findings mesh with the results tables?

#### Extensions

- What are the broader implications of this research?
- What theoretical argument might you make to explain the phenomenon?
- What additional tests would you want to run to check the robustness of the findings?
- How might you change the empirical testing (and why)?
- How might you apply this research (or some aspect of it) to your research project?

## References and Recommended Readings

- Acock, Alan C. 2014. A Gentle Introduction to Stata. fourth ed. College Station, TX: Stata Press.
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- Bennett, D Scott, and Allan C Stam. 2000a. "EUGene: A conceptual manual." *International Interactions* 26 (2): 179–204.
- Bennett, D Scott, and Allan C Stam. 2000b. "Research Design and Estimator Choices in the Analysis of Interstate Dyads When Decisions Matter." *Journal of conflict resolution* 44 (5): 653–685.
- Bennett, D Scott, and Allan C Stam. 2000c. "A universal test of an expected utility theory of war." *International Studies Quarterly* 44 (3): 451–480.
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- Buhaug, Halvard, and Kristian Skrede Gleditsch. 2008. "Contagion or Confusion? Why Conflicts Cluster in Space." *International Studies Quarterly* 52 (2): 215–233.
- Butler, Christopher K. 2011. "Superpower Dispute Initiation: An Empirical Model of Strategic Behavior." International Area Studies Review 14 (3): 61–90.
- Butler, Christopher K, Tali Gluch, and Neil J Mitchell. 2007. "Security Forces and Sexual Violence: A Cross-National Analysis of a Principal Agent Argument." *Journal of Peace Research* 44 (6): 669–687.
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- Chenoweth, Erica, and Kathleen Gallagher Cunningham. 2013. "Understanding nonviolent resistance An introduction." *Journal of Peace Research* 50 (3): 271–276.
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- Early, Bryan R, Matthew Fuhrmann, and Quan Li. 2013. "Atoms for Terror? Nuclear Programs and Non-Catastrophic Nuclear and Radiological Terrorism." *British Journal of Political Science* 43 (October): 915–936.
- Enterline, Andrew J. 1998. "Regime changes, neighborhoods, and interstate conflict, 1816-1992." *Journal of Conflict Resolution* 42 (6): 804–829.
- Fearon, James D, and David D Laitin. 2003. "Ethnicity, insurgency, and civil war." American political science review 97 (01): 75–90.
- Findley, Michael G, and Joseph K Young. 2012. "Terrorism and civil war: A spatial and temporal approach to a conceptual problem." *Perspectives on Politics* 10 (02): 285–305.
- Fuhrmann, Matthew, and Jeffrey D Berejikian. 2012. "Disaggregating Noncompliance Abstention versus Predation in the Nuclear Nonproliferation Treaty." *Journal of Conflict Resolution* 56 (3): 355–381.
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- Quackenbush, Stephen L, and Michael Rudy. 2009. "Evaluating the monadic democratic peace." Conflict Management and Peace Science 26 (3): 268–285.
- Salehyan, Idean. 2008. "The Externalities of Civil Strife: Refugees as a Source of International Conflict." American Journal of Political Science 52 (4): 787–801.
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- Walter, Barbara F. 2004. "Does conflict beget conflict? Explaining recurring civil war." *Journal of Peace Research* 41 (3): 371–388.
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Table 4: Schedule for POLS 541: Stats of Conflict

Date	Topic	Reading	What's Due
Jan 20	Introductions, Replication, & Systemic Level of Analysis	Syllabus DA-RT Discussions Gleditsch (2008) Crescenzi and Enterline (1999)	
Jan 27	Reading Codebooks	MID Codebook ACD Codebook	
Feb 3	Monadic Level of Analysis	Quackenbush and Rudy (2009) Hendrix and Salehyan (2012)	Phase 1
Feb 10	Merging Data Sets		
Feb 17	Dyadic Level of Analysis	Crescenzi (2007) Nilsson (2008)	Phase 2
Feb 24	EUGene	Bennett and Stam (2000a) Bennett (2011)	
Mar 2	Dyadic vs. Directed-Dyadic	Bennett and Stam (2000b)	Phase 3
Mar 9	Directed-Dyadic	Salehyan (2008)	
Mar 16	Spring Break		
Mar 23	Disaggregating Civil War	Shellman, Hatfield, and Mills (2010) Cederman, Gleditsch, and Buhaug (2013, ch. 4)	Phase 4
Mar 30	Conflict as the Level of Analysis	Bolks and Stoll (2003) Cunningham (2006)	
Apr 6	N-adic Level of Analysis	Poast (2010)	Phase 5
Apr 13	Spatial Analysis 1	Ward and Gleditsch (2002) in R	
Apr 20	Spatial Analysis 2	Theisen, Holtermann, and Buhaug (2011)	Phase 6
Apr 27	Catch up		
May 4			Presentations
May 13			Final papers