Spring 2018 IR 211 International Relations: Approaches to Research Last update: January 5, 2018

School of International Relations University of Southern California

Lectures: MW 3:30-4:50pm, SOS B2

Instructor: Prof. Tyson Roberts email: tysonrob@usc.edu

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This syllabus is current as of the version date above. It is subject to change. You will be notified in class and/or by e-mail whenever the syllabus is updated. The current version of the syllabus will always be posted on Blackboard.

Course Description and Objectives

This class is an introduction to social science research methodology. Our main goal is to teach you the basics of creating and consuming research in the social sciences, and international relations in particular. The course will lead you through conceptualization and theory construction, the derivation of testable hypotheses, and how to use data analysis methods to evaluate these hypotheses. We will cover causal inference, observation and measurement, ethics of social science research, and quantitative research methods. We will also discuss the way in which academic articles in the social sciences are written, and how they should be read.

This course includes some introductory statistics, and requires use of Excel for some class assignments. These include descriptive statistics, contingency tables, correlation analysis, and significance tests for relationships between variables from different quantitative datasets.

Students will learn and be able to demonstrate through the course requirements the following key components of quantitative reasoning:

- *Critical Thinking*: Students will use statistical and logical inference to pose and evaluate hypotheses, claims, questions and problems within social science.
- *Logical Integrity*: Students will understand the logical structure of social science inquiry to distinguish between assumptions and implications.
- Application to social processes: Students will be able to apply their quantitative and qualitative reasoning to engage in real world empirical analysis of international relations problems and puzzles.

After the course, you will be able to:

- 1. Develop theories of social science phenomena that are logically consistent, using deductive and inductive reasoning
- 2. Formulate hypotheses about relationships between variables that can be tested empirically under certain assumptions
- 3. Employ appropriate methodological techniques to test hypotheses with quantitative data
- 4. Estimate the magnitude of the relationship between variables using methods such as cross tabulations, correlation analysis, and differences in means
- 5. Measure uncertainty using confidence intervals and interpret these results building upon basic concepts in probability theory
- 6. Identify potential challenges to causal inference and design empirical strategies to distinguish correlation from causation.
- 7. Read and manipulate quantitative data in a spreadsheet format
- 8. Create effective visual depictions of statistical patterns in data using visualization techniques
- 9. Present your analysis to an audience in written, graphic, and oral media

Course Requirements and Grading

Homework and research project: 20%

Midterm: 20%Final: 20%

Participation: 10%Reading quizzes: 10%

Required Textbook:

- W. Phillips Shively, *The Craft of Political Research*. 9th ed. Upper Saddle River, NJ: Prentice Hall, 2013.
- (All other required readings and viewings will be posted on Blackboard. There will also be online exercises assigned from Khan Academy. Students who aren't able to answer these questions easily should watch the associated videos. Students are encouraged to donate a few dollars to Khan Academy.)

Optional Textbook:

• Earl Babbie, *The Practice of Social Research*. 12th ed. Belmont, CA: Thomson Wadsworth, 2010.

Homework

The course will follow a "learning-by-doing" approach and will place emphasis on gaining experience in designing social science research and analyzing data through multiple short problem sets during the semester. There will be a total of 8 homework assignments, due as specified in the course outline below via Blackboard. Late assignments will be penalized with a 50% penalty if they are submitted within the same week they were due (e.g. if your grade is 80%, it will be reduced to 40%). Assignments more than one week late will not be accepted and their grade will be 0%.

Some assignments will be part of a semester-long course group project, which will culminate with a poster session in the final week of class. Some others will be individual submissions. In these cases, homework assignments must reflect your own work. You may (and are encouraged) to discuss individual homework assignments with other students, but if you do so, you must list the students with whom you have discussed the assignment on the top of your homework.

You must do all computer work and write all answers yourself. DO NOT hand in homework for which any of your answers are identical to your peers, even if your peers' names are listed on your assignment. This will be considered cheating. Students who cheat on either a homework assignment or an exam will receive an F in the course and the case will be referred to the USC Student Judicial Affairs and Community Standards.

All homework assignments must be submitted as a Word or PDF document with questions and pages numbered. For assignments where Excel is required, include the printed output in your homework submission. All assignments are due via Blackboard (not in paper), unless otherwise noted.

Midterm and Final

There will also be a midterm and a final. The midterm exam will be administered in class on February 28. The final exam will be administered during the time scheduled by the school.

You will be permitted one index card "cheat sheet" for the midterm and two index cards "cheat sheet" for the final. The final is cumulative, and both exams will cover material from lecture, section, and the required readings/viewings/listenings.

Participation

This course requires your active participation, particularly during the sections. Students are required to attend both lectures and sections, and to get involved in class discussions. 10% of the grade will be based on the extent to which you become an active contributor to the course. This part of the grade will be evaluated by the Teaching Assistants.

Reading quizzes

Students are expected to complete all assigned readings before the class for which they are assigned, and to arrive in class and in section prepared to discuss that material. Short reading quizzes will be administered before the beginning of most classes, and some other times at the end of the class. They will not be hard. They are designed to test whether you did the reading, not whether you grasped every nuance. Do the reading and you should get the questions right. You do not need to purchase a clicker for this class. Reading quizzes will be available at through www.pollev.com. You can visit it from your laptop or smartphone during class. To make sure your answers are recorded, you will need to register using your USC email address so that we can record your participation. More details will be provided during the first week of class. Every time you complete a quiz, you will need to log in first. If you have any issue completing the quiz, please get in touch with your TA.

Americans with Disabilities Act

Students requesting accommodations based on disability are required to register with Disability Services and Programs each semester. A letter of verification for approved accommodations can be obtained from DSP when adequate documentation is filed. Please be sure the letter is delivered to me as early in the semester as possible. DSP is open Monday-Friday 8:30-5:00. The office is in Student Union 301 and their phone number is 213-740-0776. Students must make their request in the stipulated period prior to an exam.

Policy on Academic Ethics and Honesty

Academic honesty is fundamental to the activities and principles of a university. All members of the academic community must be confident that each person's work has been responsibly and honorably acquired, developed and presented. Any effort to gain an advantage not given to all students is dishonest whether or not the effort is successful. The academic community regards academic dishonesty as an extremely serious matter, with serious consequences. When in doubt about plagiarism, paraphrasing, quoting or collaboration, consult your teaching assistant. For more information on USC policies regarding student integrity and plagiarism, see http://dornsife.usc.edu/usc-policies/#plagiarism.

COURSE OUTLINE AND READINGS

Section W1 **No section!** Get an early start on reading/viewing for next week.

Jan. 8 **Introduction to the course**

Jan. 10 **The Big Picture**

Required reading, viewing, and doing:

- Shively, pp. 1-11
- Jonathan Haidt. Three Stories About Capitalism (Talk is 25 minutes long. You only need to watch the first 14:30 of the talk) https://www.youtube.com/watch?v=iOu_8yoqZoQ
- Go to http://www.yourmorals.org/ and complete one or more survey.

Section W2: *Course introductions.* (Homework 1 due noon Jan. 29)

Jan. 15 NO CLASS (MLK Day)

Ian. 17 **Ethics Issues**

Required reading and viewing:

- Shively pp. 11-13
- The Stanford Prison Experiment: https://www.youtube.com/watch?v=sZwfNs1pqG0
- "Indian Tribe Wins Fight to Limit Research of Its DNA" http://www.nytimes.com/2010/04/22/us/22dna.html?pagewanted=all
- Singal, Jesse. 2015. "The Case of the Amazing Gay-Marriage Data: How a Graduate Student Reluctantly Uncovered a Huge Scientific Fraud." https://www.thecut.com/2015/05/how-a-grad-student-uncovered-a-huge-fraud.html

Section W3: *The Scientific Method*. (Homework 1 due noon Jan. 29)

Jan. 22 **The Scientific Method**

Required reading and viewing:

• Simon Jackman's TED talk on The Democracy Data Revolution https://www.youtube.com/watch?v=INf5u29n-50

Jan. 24 **Selecting Research Questions**

Required reading:

- Shively pp. 14-32
- William Easterly, Ross Levine. 2003. "Tropics, germs, and crops: how endowments influence economic development." *Journal of Monetary Economics* 50. Read *Introduction*, pp. 3-6 only.
- Zeev Maoz and Bruce Russett. 1993. "Normative and Structural Causes of Democratic Peace, 1946-1986." *The American Political Science Review*, 87(3). Read p. 624 only.
- Alberto Alesina and David Dollar. 2000. "Who gives foreign aid to whom and why?" *Journal of Economic Growth*, 5. Read *1. Introduction*, pp. 33-34 only.

Section W4: *Testable hypotheses.* (Homework 2 due noon Feb. 5)

Jan. 29 **Reviewing the Literature**

Required reading:

- Jeffrey Knopf. 2006. "Doing a Literature Review." PS: Political Science 39(1): 127-132 http://journals.cambridge.org/action/displayAbstract?fromPage=online &aid=386229&fileId=S1049096506060264
- William Easterly, Ross Levine. 2003. "Tropics, germs, and crops: how endowments influence economic development." Read *Literature Review*, pp. 6-11.

• Alberto Alesina and David Dollar. 2000. "Who gives foreign aid to whom and why?" *Journal of Economic Growth*, 5. Read *2. Literature Review*, pp. 34-35 only.

Jan. 31 **Theory and Hypotheses**

Required reading:

- Branislav L. Slantchev. 2005. "The Scientific Method." http://slantchev.ucsd.edu/courses/ps12/01-scientific-method.pdf
- Zeev Maoz and Bruce Russett. 1993. "Normative and Structural Causes of Democratic Peace, 1946-1986." Read *Theoretical Considerations*, pp. 624-627.

Section W5: *Literature Review.* (Homework 2 due noon Feb. 5).

Feb. 5 **Theory Evaluation**

Required reading:

- Zeev Maoz and Bruce Russett. 1993. "Normative and Structural Causes of Democratic Peace, 1946-1986." Skim rest of article; read *Conclusions*, pp. 636-637.
- Rosato, S. 2003. "The Flawed Logic of Democratic Peace Theory," American Political Science Review 97:1, pp. 585-602.
- Branislav L Anna Alexandrova, and Erik Gartzke. 2005. "Probabilistic Causality, Selection Bias, and the Logic of the Democratic Peace," *American Political Science Review* 99:3, pp. 459-462.

Feb. 7 **Concepts and Measures**

Required reading and viewing:

- Shively pp. 33-41
- "What is GDP" http://www.npr.org/sections/money/2011/10/26/141741360/video-what-is-gdp
- "What does Nigeria's new GDP number actually mean?" http://africanarguments.org/2014/04/08/what-does-nigerias-new-gdp-number-actually-mean-by-morten-jerven/

Read (or skim) *one* (or both!) of the following:

- John A. Vasquez and Brandon Valeriano. 2010. "Classification of Interstate Wars." *The Journal of Politics*, Vol. 72, No. 2, Pp. 292–309.
- Michael Coppedge, Angel Alvarez, and Claudia Maldonado. 2008. "Two Persistent Dimensions of Democracy: Contestation and Inclusiveness." *The Journal of Politics*, Vol. 70, No. 3, Pp. 632–647.

Section W6: *Group research design*. (Homework 3 due noon Feb. 12)

Feb. 12 **Measurement Reliability and Validity**

Required reading:

- Shively pp. 42-72
- Clark, Golder and Golder. 2018. Principles of Comparative Politics, pp. 150-169.

Recommended Reading:

 Adcock and Collier. "Measurement Validity: A shared standard for qualitative and Quantitative Research." http://polisci.berkeley.edu/sites/default/files/people/u3827/APSR2001-validity.pdf (pp. 529-532 and p. 536-544.)

Feb. 14 Causal Inference and Research Design

Required reading:

- Shively pp. 73-95
- McDermott, Rose. "Experimental Methods in Political Science." *Annual Review of Political Science.* 5(2002), 31-61 (skip pages 41-56)

Section W7: *Experiments*. (Homework 4 due noon Feb. 21)

Feb. 19 **NO CLASS (Presidents Day)**

Feb. 21 **Experiments, True and Natural**

Required reading:

- Poverty Action Lab write-up of Miguel de-worming paper http://www.povertyactionlab.org/evaluation/primary-schooldeworming-kenya
- The Impact of Women Policy Makers on Public Goods in India https://www.povertyactionlab.org/evaluation/impact-women-policy-makers-public-goods-india

Section W8: *Experiments & Review*.

Feb. 26 **Class Experiment (please bring laptop to class) and Midterm Review** Required reading:

- Susan Dynarski. 2017. "Laptops Are Great. But Not During a Lecture or a Meeting." https://www.nytimes.com/2017/11/22/business/laptops-not-during-lecture-or-meeting.html
- Faria Sana, Tina Weston, Nicholas J. Cepeda. 2013. "Laptop multitasking hinders classroom learning for both users and nearby peers." *Computers and Education* 62: 24-31. https://doi.org/10.1016/j.compedu.2012.10.003

Feb. 28 MIDTERM

Section W9: *Data sampling & selecting.* (Homework 5 due noon Mar. 19)

March 5 **Estimating Sampling Error**

Required viewing:

- What is sampling error? https://www.youtube.com/watch?v=uGuWrPFStdg
- http://rocknpoll.graphics/
- The Central Limit Theorem https://www.youtube.com/watch?v=jvoxEYmQHNM

March 7 **Selection of Observations for Study**

Required reading:

- Shively pp. 96-110
- Zeev Maoz and Bruce Russett. 1993. "Normative and Structural Causes of Democratic Peace, 1946-1986." Read *Spatial-Temporal Domain* section, p. 627.
- Re-read Selection Bias section of Branislav L Anna Alexandrova, and Erik Gartzke. 2005. "Probabilistic Causality, Selection Bias, and the Logic of the Democratic Peace," p. 461.

Suggested reading:

- "Examples of Sampling Techniques:"
 http://ccnmtl.columbia.edu/projects/qmss/samples_and_sampling/types_of_sampling.html
- "Key Research Concepts in Politics and International Relations: Sampling." by Harrison and Callan.
- Christopher H. Achen and Duncan Snidal. 1989. "Rational Deterrence Theory and Comparative Case Studies." World Politics, Vol. 41, No. 2, pp. 143-169

March 12-16 **SPRING BREAK**

Section W10: **Surveys.** (Homework 5 due noon Mar. 19); administer surveys.

March 19-21 **Survey Research**

Required reading and viewing:

- Designing a questionnaire: https://www.youtube.com/watch?v=FkX-t0Pgzzs
- Julia Gray and Raymond Hicks. 2014. "Reputations, Perceptions, and International Economic Agreements." *International Interactions*, 40. Read pp. 325–337.

Section W11: *Univariate analysis.* Discussion of Homework 6 due noon April 2)

March 26 **Displaying and Analyzing Quantitative and Categorical Data**Required reading and viewing:

- Robert Gould and Colleen Ryan. 2015. *Introductory Statistics,* Chapter 2: Picturing Variation with Graphs, pp. 36-60
- Answer questions in the *Analyzing categorical data* and *Displaying and*

comparing quantitative data sections in https://www.khanacademy.org/math/statistics-probability?t=practice; watch lessons as necessary

March 28 **Descriptive Statistics**

Required reading and viewing:

- Robert Gould and Colleen Ryan. 2015. *Introductory Statistics,* Chapter 3: Numerical Summaries of Center and Variation, pp. 82-117
- Answer questions in the Summarizing quantitative data and Modeling data distributions sections in https://www.khanacademy.org/math/statistics-probability?t=practice; watch lessons as necessary.

Section W12: *Bivariate analysis.* (Homework 6 due noon April 2)

April 2 Regression Analysis: Bivariate, Interval Data

Required reading and viewing:

- Shively pp. 111-132
- The Correlation Coefficient Explained in Three Steps https://www.youtube.com/watch?v=ugd4k3dC_8Y
- Answer questions in the Exploring bivariate data section in https://www.khanacademy.org/math/statistics-probability?t=practice and watch lessons as necessary.
- William Easterly, Ross Levine. 2003. "Tropics, germs, and crops: how endowments influence economic development." Read *3. Data and Summary Statistics* section, pp. 11-22.
- Alberto Alesina and David Dollar. 2000. "Who gives foreign aid to whom and why?" *Journal of Economic Growth*, 5. Read *3. Data*, pp. 35-38 only.

April 4 **Hypothesis Testing and Confidence Intervals**

Required reading and viewing:

- Shively pp. 149-165
- Confidence Interval https://www.youtube.com/watch?v=v0FXSAdYCkQ
- John Bohannon. 2015. "I Fooled Millions Into Thinking Chocolate Helps Weight Loss. Here's How." https://io9.gizmodo.com/i-fooled-millions-into-thinking-chocolate-helps-weight-1707251800
- Is most published research wrong? https://www.youtube.com/watch?v=42QuXLucH3Q

Section W13: *Hypothesis testing.* (Homework 7 due noon April 16)

April 9 **Hypothesis Testing Application**

Required reading and viewing:

• Answer questions in the *One sample z and t significance tests* and *Two-sample inference for the difference between groups* sections in

- https://www.khanacademy.org/math/statistics-probability?t=practice and watch lessons as necessary.
- Julia Gray and Raymond Hicks. 2014. "Reputations, Perceptions, and International Economic Agreements." Read *Test of Hypotheses* and *Conclusion*, pp. 337-346.

April 11 Regression Analysis: Further Topics

Required reading and viewing:

- Shively pp. 133-148
- Answer questions in the *Advanced regression* section in https://www.khanacademy.org/math/statistics-probability?t=practice and watch lessons as necessary.
- Zeev Maoz and Bruce Russett. 1993. "Normative and Structural Causes of Democratic Peace, 1946-1986." Read pp. 628-632.
- William Easterly, Ross Levine. 2003. "Tropics, germs, and crops: how endowments influence economic development." Read *4. Regression results* and *Conclusion* sections, pp. 22-37.

Section W14: *Hypothesis testing.* (Homework 7 due noon April 16)

April 16 **Consuming Research**

Required reading and viewing:

 Hughes, "Visualizing inequality: How graphical emphasis shapes public opinion", Research & Politics. http://journals.sagepub.com/doi/full/10.1177/2053168015622073

April 18 **Preparing and Presenting Original Research**

Required reading and viewing:

 http://undergrad.usc.edu/experience/research/symposium/symposium -posters/

Section W15: *Original Research.* (Homework 8 - individual research memos - due Apr 23)

April 23 **Poster Session**

April 25 Review

Final Exam