POL 222H1 (F)   INTRODUCTION TO QUANTITATIVE REASONING I

Tuesdays and Thursdays, 6- 8 pm, SS 1083

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Office Hours: after class, location TBA

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What this course is all about:

This course introduces students to the underlying ideas and methods of political science and how the scientific method allows scholars to answer questions about politics and power. We will cover principles of research design, and introduce the concepts underpinning statistical inference, with the goal of enabling students to read statistical research. The course emphasizes being able to understand the kinds of descriptive and inferential statistics presented in many professional and policymaking jobs, that help practitioners make better decisions and efficiently communicate their findings. No mathematical background beyond elementary-school arithmetic and familiarity with simple graphs is required.

Learning objectives:

At the end of this course, I expect all students to:
- Become an informed reader of political scholarship.
- Understand critical features of the scientific method and apply such principles to the study of politics.
- Demonstrate a basic understanding of social statistical methods, terms and the interpretation of common statistical methodologies.
- Apply common statistical methods to answer research questions using public opinion data.

Lectures & Tutorials

Tutorials will be held on May 22, May 31, June 5, June 7 and June 12 before and after lecture in BL 312 and/or WE 74 (and/or TBA). Tutorials may also be held after the midterm in a campus computer lab. The TA will also be available to help students review for the midterm on May 25 and the final exam. Dependent on lab availability, we will also schedule time before Worksheets 1-3 are due when the TA and/or the instructor can provide hands on support to students completing those tasks.

Required Readings

Textbook-style readings are primarily found in two on-line, open source methodological textbooks:

Bhattacherjee, Anol, "Social Science Research: Principles, Methods, and Practices" (2012). Textbooks Collection, University of South Florida. 2nd Edition. http://scholarcommons.usf.edu/oa_textbooks/3

Jenkins-Smith, Hank C., Ripberger, Joseph T., Copeland, Gary, Nowlin, Matthew C., Hughes, Tyler, Fister, Aaron L., Wehde, Wesley (2017). "Quantitative Research Methods for Political Science, Public Policy and Public Administration (With Applications in R)." https://shareok.org/handle/11244/52244

Students are encouraged, though, to substitute or augment the above texts with any of the following, especially if such texts are already owned or students have a strong preference for printed materials:

The text used during the fall and winter term for POL222 (one chapter is required):

Kellstedt, Paul M. and Guy Whitten. *Fundamentals of Political Science Research*, Cambridge University Press, 2nd or 3rd Edition

The text used at UTSC for a similar course:

Barakso, Maryann, Daniel M. Sabet, and Brian Schaffner. *Understanding Political Science Research Methods: The Challenge of Inference*. Routledge, 2014.

The text ordered for POL232 (one chapter is required for POL222 or easily substituted by any other textbook that covers regression, including Jenkins-Smith et al, above):

Noack, Andrea *Social Statistics in Action: A Canadian Introduction.* Oxford University Press, 2018

It will often be obvious which chapters from the above texts substitute for the on-line texts, but in the reading schedule below, I've also tried to indicate which chapters substitute.

Most weeks, there are also required readings from academic journals and websites. All of these readings are available for free via the University of Toronto library or will be available on Blackboard.

Evaluation and Assessments

GRADING SCHEME	%	Due Date
Participation/Attendance	10	
Worksheet 1: Hypotheses	5	May 17
Reading Quizzes	5	May 10^, May 17, May 31 & June 14
Article Summary	5	May 20
Worksheet 2: Descriptive Statistics	5	June 3
Worksheet 3: Crosstabulations & t-tests	10	June 10
Worksheet 4: Regression	10	June 15
Midterm	25	May 25
Final Exam	25	TBA

^ Must be completed three days after posted deadline, on May 13.

GRADING POLICIES

All matters of grading, exemptions, and discipline procedures will be handled in accordance with the Faculty Arts & Science policies. Late assignments will be penalized 5% per day for the first eight days of lateness. All assignments and quizzes are due on-line by midnight on the date the assignment is due.

After eight calendar days of lateness, the teaching assistant and the instructor will refuse to accept the work for grading.

Extensions for non-health related reasons may only be granted on the day prior to the deadline. Students whose health renders them unable to complete an assignment should contact the professor before deadlines under non-exceptional circumstances.

There will be an opportunity to take the midterm if a student has an excused absence, but the make-up test must be completed within five days of the original test.

Any student who believes that any work has been unfairly graded may ask the instructor to re-evaluate his or her work. Grading appeals should be submitted with a cover letter explaining the basis of the appeal to the instructor or the teaching assistant. No oral or emailed appeals will be considered. Such re-marking may involve the entire piece of work, and may raise or lower the mark. All other appeals and complaints will be handled in a manner consistent with Faculty Arts & Science policies. These policies can be found at: http://www.artsci.utoronto.ca/main/faculty/resources/faculty/acaresources

Students are strongly advised to keep rough and draft work, and copies of all submitted assignments. Utilize "the cloud" as a backup or primary folder for your classwork whenever possible (the university provides access to OneDrive, but Google Drive, Dropbox, iCloud, and [the Canadian] Sync.com can be utilized for no cost. All essays/assignments should be kept by the student until the marked essays/assignments have been returned to them and the grades are posted.

ASSIGNMENT DETAILS

NOTE: Complete details of the assignments will be available in separate hand-outs distributed on Blackboard.

Worksheets

Worksheet 1: Hypotheses. A short worksheet intended to help you master writing hypothesis statements, transforming value statements into testable hypotheses, differentiating independent and dependent variables and identifying units of analysis. 5%

Worksheet 2: Descriptive Statistics. A short worksheet designed to give you the opportunity to learn how to download data, complete several recodes and communicate the relevant descriptive statistics (including central tendencies and measures of dispersion). 5%

Worksheet 3: Crosstabulations and t-tests. A worksheet to give you practice running and analyzing crosstabulations and t-tests. 10%

Worksheet 4: Regression. For this worksheet you will run several multivariate regression analyses and interpret the results. 10%

Reading Quizzes

Below, you will find four weeks that are highlighted with an asterisk. For these weeks, you will find an on-line open book quiz on that week's readings. Each quiz includes five to ten multiple choice and/or true/false questions. A copy of the questions in a Word or PDF file can be consulted while you are completing the readings. When you are ready, please log into Blackboard and submit your answers there (Blackboard calls them "tests"). You will have one chance to take each quiz, so be sure you are ready to answer each question before opening the quiz on Blackboard.

Article Summary

A set of questions on Fried et al.'s research into police corruption in Mexico that will ask you report on the important question the article seeks to answer, identify the competing perspectives other scholars had on the incidence of corruption, summarize the article's findings, and describe the methods the author's employed to complete their study.

Exams

Midterm. A multiple choice test administered during class on May 25 covering material introduced in class since the beginning of term. Expect many questions on key concepts explained in both readings and lectures, along with at least a few questions on readings that were not extensively covered in lecture to reward the most attentive and conscientious students.

Final. A test with both multiple choice and short answer questions on material since the midterm (although some key concepts like hypotheses introduced early in the term may be revisited). Expect many questions that gauge your ability to interpret statistical tables and a few substantive questions on required readings.

PARTICIPATION:

Lecture time will be a mixture of lecture and opportunities for discussion. You can also expect to participate on-line on Blackboard through discussion forums. On such forums you will find occasional discussions on topics suggested by the readings or lectures, and an opportunity to post a picture of a puppy or a kitten before the third class.

PLAGIARISM

Plagiarism is   serious academic offence and will be dealt with accordingly. For further clarification and information on plagiarism please see Writing at the University of Toronto
http://www.writing.utoronto.ca/advice/using-sources

Although there may be opportunities to consult with classmates and to collaborate on certain assignments with the prior consent of the teaching assistant or instructor, all work submitted must be original and reflect the student's own efforts.

Turnitin.com

Students agree that by taking this course all required work will be subject to submission for textual similarity review for the detection of plagiarism. Normally, students will be required to submit their course essays to Turnitin.com for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the Turnitin.com reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com web site. These requirements extend in POL222 to the submission of worksheets & the article summary, except when the worksheet (or quiz) is entirely or predominantly multiple choice. The class ID for turnitin.com is 18072575 and the password is: reliability9

Accessibility Needs

I wholeheartedly share the University of Toronto's commitment to accessibility and hope that every student is given a fair opportunity to excel in this course. Students with diverse learning styles and needs are welcome in this course. I invite you to discuss any accessibility concerns about the course, the classroom or course materials with me and/or staffers at Accessibility Services. If you require accommodations for a disability, or have any accessibility concerns about the course, the classroom or course materials, please contact Accessibility Services at 416-978-8060 or

. Appointments and drop-in sessions for accessibility advisors and learning strategists are available. For more information, please visit http://studentlife.utoronto.ca/as

Other

Course Blackboard Site:

The Blackboard website is accessible when you log into http://portal.utoronto.ca using your UTORid. You can find the course listed along with other course websites in the top-left corner. On the Blackboard website you will find updated versions of this syllabus, details of all assignments, discussion forums and the course gradebook. Through Blackboard you will submit assignments to Turnitin.com.

From time to time, class announcements & material will be delivered via e-mail and/or announcements through Blackboard. It is the students' responsibility to maintain their e-mail addresses in good working order and to ensure that the e-mail address known to the university (and listed on Blackboard) is accurate. Failure to receive important class announcements & messages are NOT legitimate excuses for missing class work.

Contact

You are welcome to meet with me. My office hours are after class on Thursdays. I will often be on campus during the afternoon prior to class, and encourage you to make appointments during those times. I am at UTSC on Wednesdays and Fridays during the day. The best way to contact me is through email, but I am happy to set up a phone call with you at our mutual convenience. Because it is difficult to get to know many students in a large class, any group of four students may arrange Dutch-treat dinners or coffee-breaks with me before class on campus. I especially look forward to talking to you about topics related to the course or current political events.

Miscellaneous

Please be comfortable bringing your dinner to class, but be conscientious of needing to leave the classroom clean and avoiding food that may distract your classmates because of a strong smell or loud chewing noises.

Occasionally, students will find it helpful to consult class readings on a smartphone, tablet or laptop computer. Some students will also feel comfortable taking notes on electronic devices. However, due to the ease in which such devices can distract oneself and one's classmates, I recommend that students plan on taking notes with a pen and paper. If you are using an electronic device during class, please endeavor to ensure that your usage does not distract your classmates.

READING SCHEDULE

Quizzes are administered on the readings on Blackboard on the weeks marked with a *

May 8   Scientific Method* & Introduction

> Bhattacherjee, Anol, "Social Science Research: Principles, Methods, and Practices"
> (2012). *Textbooks Collection*. 2nd Edition., Ch. 2
> http://scholarcommons.usf.edu/oa_textbooks/3

Powner, Leanne. "Reading and Understanding Political Science" (2007)
http://jayandleanne.com/lpowner/tchdocs/readingps.pdf

Alternative textbooks:
Barakso, M. et al. *Understanding Political Science Research Methods: The Challenge of Inference*. Ch. 1 & 3.
Kellstedt & Whitten, *Fundamentals of Political Science Research,* 2nd Edition. Ch. 1

May 10   Scientific and other forms of knowledge*

Bhattacherjee, Ch. 4

[Blackstone, Amy] *Principles of Sociological Inquiry* Saylor Foundation
https://www.saylor.org/site/textbooks/Principles%20of%20Sociological%20Inquiry.pdf, Ch. 1

Rostker, Bernard D. Susan D. Hosek and Mary E. Vaiana. "Gays in the Military: Eventually, New Facts Conquer Old Taboos." *Rand Review* Spring 2011.
http://www.rand.org/pubs/periodicals/rand-review/issues/2011/spring/gays.html

Alternative textbooks:
Barakso, M. et al. *Understanding Political Science Research Methods: The Challenge of Inference*. Intro & Ch. 2

May 13   *(Sunday, outside of class) On Blackboard: Could you learn about a social event or phenomena from reading a novel? What advantages might novels have over scholarly research? In what situations might make novels preferable to academic non-fiction? How might novels be inferior to scholarly research? Post to a discussion forum on Blackboard for participation credit by midnight on Sunday, May 13. A magazine article about this issue is on the forum as background reading for a very real controversy at universities today. Joining the discussion will result in participation credit.*

May 15 Causality

Kellstedt, Paul M. and Guy Whitten. *Fundamentals of Political Science Research*, Cambridge University Press, Ch. 3

[Barkan, Steven] Sociology: Understanding and Changing the Social World, pp. 45-47
http://open.lib.umn.edu/sociology/

[Blackstone, Amy] *Principles of Sociological Inquiry* Saylor Foundation
https://www.saylor.org/site/textbooks/Principles%20of%20Sociological%20Inquiry.pdf, pp. 54-59

Fried, Brian J., Paul Lagunes and Atheendar Venkataramani. 2010. "Corruption and Inequality at the Crossroads: A Multimethod Study of Bribery and Discrimination in Latin America." *Latin America Research Review* 45:1

May 17   Experiments and Control *

Bhattacherjee, Ch. 10

Licklider, Roy. "The consequences of negotiated settlements in civil wars, 1945–1993." *American Political science Review* 89.03 (1995): 681-690.

Nyhan, Brendan, Jason Reifler, Sean Richey, and Gary L. Freed. "Effective messages in vaccine promotion: a randomized trial." *Pediatrics* 133, no. 4 (2014): e835-e842.

Vavreck, Lynn. "The exaggerated effects of advertising on turnout: The dangers of self-reports." *Quarterly Journal of Political Science* 2, no. 4 (2007): 325-343.

Wantchekon, Leonard. 2003. "Clientelism and Voting Behavior: Evidence from a Field Experiment in Benin." *World Politics* 55: 399- 422.

Hypothesis Worksheet Due at midnight via turnitin.com

May 20 *Article Summary* of Fried et al

May 22 Operationalization and Measurement

Bhattacherjee, Ch. 6 & 7

Putnam, Robert, "Tuning in and turning out: the strange disappearance of social capital in America." *PS: Political science and politics*, December 1995.

Recommended: Craig, Stephen C., Richard G. Niemi and Glenn E. Silver. "Political Efficacy and Trust: A Report on the NES Pilot Study Items." *Political Behavior*, Vol. 12, No. 3 (Sep., 1990), pp. 289-314.

May 24 Midterm

May 29 Descriptive Statistics

Bhattacherjee, Ch. 14

Jenkins-Smith, H. et al. Quantitative Research Methods for Political Science, Public Policy and Public Administration (With Applications in R): 3rd Edition, Ch. 3 https://shareok.org/handle/11244/52244

Sides, John, and Kimberly Gross. "Stereotypes of Muslims and Support for the War on Terror." *The Journal of Politics* 75, no. 03 (2013): 583-598.

May 31 Probability and Sampling*

Jenkins-Smith, H. et al. Ch. 4-5.3

Murphy, Chad. "The evolution of the modern rhetorical presidency: A critical response." *Presidential Studies Quarterly* 38.2 (2008): 300-307.

Bode, Leticia, and Kajsa E. Dalrymple. "Politics in 140 characters or less: Campaign communication, network interaction, and political participation on Twitter." *Journal of Political Marketing* 15.4 (2016): 311-332.

June 3 *Worksheet 1: Descriptive Statistics* due at midnight.

June 5 Bivariate Relationships

Jenkins-Smith, H. et al. Ch. 5.4-6

June 7   Introduction to Regression

 Jenkins-Smith, H. et al. Ch. 7

June 10 *Worksheet 2: Crosstabulations & t-tests* due at midnight.

June 12 Multivariate Regression Analysis

 Noack, Andrea *Social Statistics in Action.* Oxford University Press, Ch. 12

 Wike, Richard and Nilanthi Samaranayake, "Where Terrorism Finds Support in the Muslim World: That May Depend on How You Define It - and Who Are the Targets," Pew Global Attitudes Project report, May 23, 2006, available at: http://www.pewglobal.org/2006/05/23/where-terrorism-finds-support-in-the-muslim-world/

June 14 Reading Advanced Analyses*

 Rodrik, Dani, Arvind Subramanian and Francesco Trebbi. "Institutions Rule: The Primacy of Institutions Over Geography and Integration in Economic Development." *Journal of Economic Growth,* June 2004, Volume 9(2), pp 131-165.

 Sides, John, and Kimberly Gross. "Stereotypes of Muslims and Support for the War on Terror." *The Journal of Politics* 75, no. 03 (2013): 583-598.

June 15 *Worksheet 3: Regression* due at midnight.