

POL322H1S: Introduction to Quantitative Reasoning – Summer 2015
Tuesdays and Thursdays, 2 – 4 pm, SS 2105

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Office Hours: after class, Tuesdays and Thursdays, 4-6 pm, either in the computer lab in SS 561 or SS 3049. I will be in one of those rooms almost every day, Monday-Thursday during those times.

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WHAT THIS COURSE IS ALL ABOUT:

Quantitative empirical analysis is an important part of political science research and public policy debates. The results of statistical analysis on quantitative data, such as opinion polls, election results, frequency of armed conflicts, and incidence of violence, can be seen in many research articles and books on political science and various reports on divergent policy issues published by governments, think tanks, non-profit organizations, and even the general news media. Ability to properly understand and critically assess the results of quantitative statistical analysis has become an invaluable asset for any individuals who are interested in a wide range of political, economic, social, and policy issues.

This course introduces students to principles of scientific inquiry and statistical inference to enable students to interpret statistical results. The topics to be covered include the scientific method, principles of research designs, foundations of statistical inference, and regression analysis. No prior background in mathematics or experience with computers is required or expected of students taking this course.

LEARNING OBJECTIVES:

By the end of the term, I expect student to develop an understanding of:

1. The characteristics of the scientific studies of political science, especially those employing quantitative empirical analysis, and the inherent difficulties of establishing a causal relationship between the political/economic/social/policy outcomes of interest;
2. Representative empirical research strategies to investigate the causal relationship of political/economic/social/policy phenomena of interest (a.k.a. research designs), and various threats to the validity of different research designs;
3. How to use descriptive statistics and visualization tools to summarize and interpret the nature of a political/economic/social/policy phenomenon or characteristic of interest and the relationship between two or more of them;
4. Very basics of a statistical inference to learn about the characteristics and relationships in a large population or a general social process which generates the events of our interest from sample observations.

REQUIRED READINGS

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

Additional readings available for free on-line/through the library's website or on reserve.

Babbie, Earl and Lucia Benaquisto. *Fundamentals of Social Research, 3rd edition*. Nelson, 2014 (select chapters)

Babbie and Benaquisto is available at the bookstore, on-line (for purchase or rent) and may be purchased as an “e-chapter” direct from the publisher for \$6.95 each at <http://www.nelsonbrain.com/shop/isbn/9780176662479>. Older editions and related volumes by Babbie are widely available for purchase or through the library and these are sufficient unless otherwise indicated in lecture. These editions include Babbie’s sole-authored “The Practice of Social Research” (now in its 13th edition, “Fundamentals” is the Canadian version of “The Practice”). Some similar books will also provide suitable substitutes.

GRADING SCHEME	%	Due Date
Participation/Attendance	7	
Hypothesis Worksheet	8	July 9
Research Article Review	15	August 6
Descriptive Statistics Worksheet	10	July 23
Introduction to Regression Worksheet	10	August 4
Midterm	25	July 21
Final Exam	25	TBA

GRADING POLICIES

Late assignments will be penalized 5% per day for the first ten days of lateness. All assignments and quizzes are due on-line by midnight on the date the assignment is due. After ten 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 prior to the day of 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 two days of the original test. If this is not feasible, the midterm marks will be redistributed to the final exam.

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.

ASSIGNMENTS

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

Hypothesis Worksheet.

A short worksheet design to help you master writing hypothesis statements and parsing such statements found in existing research.

Research Article Review.

A lengthier worksheet that asks you to describe the research method, hypothesis, variables, data source, and conclusion of a scholarly article reporting an empirical investigation into a political topic. A list of suggested articles will be posted. Then, you will examine a second article that either cites this article or is cited by this article, comparing the research design or data of the second article to the first. By evaluating how one updates or corrects the other you will better understand how prior research

influences later research and how different research designs can yield different answers. (3-5 pages total of written answers to specific questions).

Descriptive Statistics and Introduction to Regression Worksheet

Two worksheets that will ask you to complete statistical analyses using a mixture of following specific instructions with data provided and selecting the correct multiple choice answer and an opportunity to complete your own investigation using the same tools.

PLAGIARISM & ACADEMIC INTEGRITY

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.

Academic integrity is fundamental to learning and scholarship at the University of Toronto. Participating honestly, respectfully, responsibly, and fairly in this academic community ensures that the U of T degree that you earn will be valued as a true indication of your individual academic achievement, and will continue to receive the respect and recognition it deserves. You are expected to be familiar with the Code of Behaviour on Academic Matters, available at <http://www.artsci.utoronto.ca/osai/students>, which is the rule book for academic behaviour at the U of T. Potential offenses include, but are not limited to, plagiarism, cheating on tests and exams, fraudulent medical documentation and improper collaboration on marked work.

For specific examples of the potential academic offences, please read "What is Academic Misconduct" (<http://www.artsci.utoronto.ca/osai/The-rules/what-is-academic-misconduct>) at the Office of Student Academic Integrity's website. Please note that, as stated in this site, "(n)ot knowing the University's expectations is not an excuse." Under the Code, "the offense shall likewise be deemed to have been committed if the person ought reasonably to have known." (Code of Behaviour on Academic Matters, web version, p.2).

For further clarification and information on plagiarism, please see Writing at the University of Toronto (<http://www.writing.utoronto.ca/advice/using-sources/>). The University of Toronto treats cases of academic misconduct very seriously. All suspected cases of academic dishonesty will be investigated following the procedures outlined in the Code. The consequences for academic misconduct can be severe, including a failure in the course and a notation on your transcript. If you have any questions about what is or is not permitted in this course, do not hesitate to contact the instructor.

Turnitin.com

Students agree that by taking this course all required papers except the hypothesis worksheet and the quantitative assignment will be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com web site.

PARTICIPATION:

Lecture time will be a mixture of lecture and opportunities for discussion and are available as online lecturecasts. Preparation and participation are crucial if you aspire to succeed in this course. Occasional activities such as the question about learning from novels in late-May are exercises completed in class or

in preparation for lecture will be included in participation marks. Periodically, a short assignment on the week's reading such as a short summary of the reading or a required posting to the Blackboard discussion forums may be assigned. These quizzes or assignments will be incorporated into the participation grade.

OTHER

Accessibility Needs

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the AccessAbility Services as soon as possible. Accessibility Services can be reached at www.accessibility.utoronto.ca or (416) 978-8060. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course. The University of Toronto is committed to accessibility and I share that commitment by believing that every student should have an equal chance to excel in this course. I promise to strive to create and maintain an inclusive environment and promise to provide reasonable and appropriate accommodations to persons who require them. More information is on the AccessAbility Services website.

Contact

You are welcome to meet with me. My official office hours are on Tuesdays and Thursdays after class. I will be teaching another course in SS 561 from 6-8 on MTWR nights, so I will normally be in Sid Smith between 4-6 pm. Otherwise, the best way to contact me is through email. Because it is difficult to get to know many students in a large class, any group of four students may arrange Dutch-treat dinners with me before my 6 pm class. I especially look forward to talking to you about topics related to the course or current political events.

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.

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.

READING SCHEDULE

June 30. Introduction

Powner, Leanne. "Reading and Understanding Political Science" (2007) , pp. 1-5
<http://jayandleanne.com/lpowner/tchdocs/readingsps.pdf>

July 2. The challenge of inference

Understanding Political Science Research Methods: The Challenge of Inference. Introduction & 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>

July 6 *(Monday, outside of class) 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 9:30 am on Monday, July 6. 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.*

July 7. Scientific Method and Hypotheses

Understanding Political Science Research Methods: The Challenge of Inference. Ch. 2 & 3

Barakso, Maryann. "Is There a "Woman's Way" of Governing? Assessing the Organizational Structures of Women's Membership Associations." *Politics & Gender* 3, no. 02 (2007): 201-227.

July 9. Operationalization and Measurement

Hypothesis Worksheet Due

Understanding Political Science Research Methods: The Challenge of Inference. Ch. 4

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

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.

July 14. Descriptive Statistics, Graphs and Charts

TBA

July 16. Sampling and Surveys

Babbie and Benaquisto (or other editions by Earl Babbie), *Fundamentals of Social Research*, 3rd edition. Nelson, 2014. "Sampling," (Ch. 7)

July 21. Midterm

July 23. Causality, Experiments and Control

Descriptive Statistics Worksheet Due.

Understanding Political Science Research Methods: The Challenge of Inference. Ch. 5

Schoppa, Leonard. 2013. "Residential Mobility and Local Civic Engagement in Japan and the United States: Divergent Paths to School," *Comparative Political Studies* 46 (9): 1058-1081

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

July 28. Introduction to Regression

Understanding Political Science Research Methods: The Challenge of Inference. Ch. 6

July 30. Multiple Regression

TBA

Wilson, J. Matthew and Michael Lusztig. 2004. "The Spouse in the House: What Explains the Marriage Gap in Canada?" *Canadian Journal of Political Science* 37: 979-995.

August 4. Unpacking existing quantitative research*

Introduction to Regression Worksheet Due.

Powner, Leanne. "Reading and Understanding Political Science" (2007) pp. 5-18.

+ Blades, Lisa and Drew A. Linzer. 2012. "Elite Competition, Religiosity, and Anti-Americanism in the Islamic World." *American Political Science Review* 106 (2): pp 225-243.

+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.

+Schlozman, Kay Lehman, Nancy Burns, Sidney Verba and Jesse Donahue. 1995. "Gender and Citizen Participation: Is There a Different Voice?" *American Journal of Political Science* 39 (2-May): 267-293.

(+Before class, you will be required to read two of these articles carefully so you can engage in an in-class activity using those articles).

August 6. Conclusion

Research Article Review Due.

Understanding Political Science Research Methods: The Challenge of Inference. Ch. 8

TBA. Final Exam