

POL242Y (Summer-2013): Introduction to Research Methods

MTWR 10- noon, room FE36.

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Office Hours: After class, TBA

Course Description

This course introduces fundamentals of research design and data analysis for political science. Contrary to most classes in social sciences, students in this course are expected to produce their *own* empirical research results and analyse them. The culmination of this original research is a short paper presenting an original multivariate regression analysis. Principles of scientific research design, tips on conducting an effective literature review, and several qualitative research techniques will be reviewed. To acquire the necessary research tools, students will complete multiple assignments and in-class tasks utilizing computer-based exercises. No prior knowledge of university-level math is assumed.

Goals:

- Apply principles of research design, including hypothesis testing and literature reviews.
- Become familiar with qualitative research methods.
- Learn which analysis is appropriate given the research question and the data.
- Perform and interpret statistical analyses commonly performed by political scientists and public policy analysts.
- Gain proficiency with SPSS, a common statistics program used by social scientists.
- Complete an original multivariate statistical analysis.

Evaluation:

Six worksheets –	35%
Final Exam	20%
Midterm	14%
Regression Analysis Paper –	10%
Six in-class quizzes –	10%
Qualitative research assignment –	5%
<u>Participation & Attendance –</u>	<u>6%</u>
	Total = 100%

Assignments

Details of the assignments can be found on Blackboard.

Grading Policy

Assignments should be turned in at the start of the class on their due date. Late assignments should be turned in to the Department of Political Science during business hours. All matters of grading, exemptions, and discipline procedures will be handled in

accordance with the Faculty of Arts and Science Academic Handbook. All appeals and complaints will be handled in a manner consistent with the regulations described in the handbook. See <http://www.artsandscience.utoronto.ca/studentaffairs/handbook.shtml> for the complete handbook.

Extensions for non-health reasons may only be granted prior to the day of the assignment deadline, exam or quiz by the instructor or the TA. Any extensions due to health must be arranged within 24 hours of the deadline. Late assignments will be penalized 4% per day for the first four days of lateness. Each day ends at 4 pm. After four days of lateness, the teaching assistants and the instructor will refuse to accept the work for grading.

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. No appeals will be considered after Tuesday, June 18. All other appeals and complaints will be handled in a manner consistent with the regulations described in the handbook.

Plagiarism – turnitin.com

Plagiarism is a serious academic offense with a severe penalty. It is essential that you understand what plagiarism is and that you do not commit it. Please see <http://www.utoronto.ca/writing/plagsep.html> for more information and tips on how to avoid plagiarism.

Students agree that by taking this course all required papers and write-ups must be submitted 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.

Collaborative Work

During class, especially during laboratory activities, you will be encouraged to collaborate and work with your classmates. Be sure to indicate on all work turned in for a grade if you collaborated with anyone during the completion of the assignment..

Tutorials

Tutorials are an essential part of POL242. Tutorials provide an opportunity to complete work for class with the assistance of the teaching assistants. Because of the highly technical nature of the course, students typically do perform much better if they attend tutorials. All tutorials are held in the classroom FE 36.

Required Readings:

Paul M. Kellstedt & Guy Whitten, *The Fundamentals of Political Science Research*, Cambridge University Press, Second Edition, 2013.

Other required readings marked ONLINE are available electronically through the University of Toronto Library catalogue. Those not ONLINE will be made available through Blackboard.

Recommended Alternative Readings:

Previous editions of POL242 have used these texts. These books have different strengths and if you speak to me, I may be able to recommend that you substitute these texts for Kellstedt and Whitten. Some older editions may be available at the library:

Keith Archer and Loleen Berdahl, *Explorations*, Oxford, 2011.

Jarol B. Manheim, Richard Rich, Lars Willnat and Craig Leonard Brians, *Empirical Political Analysis: Research Methods in Political Science*, 8th edition (Pearson Longman, 2010).

Michael Haan, *An Introduction to Statistics for Canadian Social Scientists*, (Oxford, 2009).

Phillip H. Pollock III, *The Essentials of Political Analysis*, 4th edition, Congressional Quarterly Press, 2011.

Other readings are available on-line through archives like JStor or directly through Portal.

Students are also advised to consult the following on-line textbooks:

Wolfgang Ludwig-Mayerhofer, *Internet Guide to SPSS for Windows*
<http://www.lrz-muenchen.de/~wlm/wlmspss.htm>

John L. Korey, *Politically-Oriented Web-Enhanced Research Methods for Undergraduates — Topics and Tools* as adapted
from: <http://www.csupomona.edu/%7Ejlkorey/POWERMUTT/index.html>

More recommended readings on statistics, graphics, technical writing and presentations can be found at: http://www.chass.utoronto.ca/pol242/rec_readings.htm

Computer Software

In this class, we will be using a widely used statistical program produced by IBM called SPSS and a compatible free, open source program called PSPP. All the computers in FE 36 have copies of SPSS and PSPP installed. Students who want to work from home or own a copy of the software on their personal computer have several options:

- Students can purchase a one-year license for SPSS for \$80 through the university at <http://www.utoronto.ca/ic/software/detail/spss.html>. Other license options may also be available.

- **PSPP is free**, and can be downloaded for PCs from here <http://sourceforge.net/projects/pspp4windows/files/>. Mac users can find a version here: <http://bmi.cchmc.org/resources/software/pspp> PSPP is open-source and non-commercial, so not all of the features of SPSS are available (yet?), but most, if not all of the tasks required for this class will work on PSPP. You are strongly advised to download PSPP on your home computer or laptop to supplement work done on either SPSS or PSPP in the computer lab.
- An older version of SPSS with many of the datasets used in our class is available online for free with one's UTORid here: <http://groups.chass.utoronto.ca/pol242/>
- The instructor also support a statistics program called STATA (one year \$59 or perpetual license for \$108 when purchased through the university), and a free, powerful program called R, which can be run through Excel (<http://cran.r-project.org/>)

Class Schedule:

Required readings will be indicated in a later draft of this syllabus.

Week 1

Monday, May 11 – Introduction: What is Social (Scientific) Research?

Tuesday, May 12 – Levels of Measurement and Descriptive Statistics

Wednesday, May 13 - SPSS/PSPP & Introduction to bivariate analysis

Thursday, May 14- Scientific Method

Univariate Worksheet Due

Week 2

Monday, May 20 – HOLIDAY

Tuesday, May 21- Chi Square and Measures of Association

Hypotheses Worksheet Due.

Wednesday, May 22 – Comparative Method

Thursday, May 23 – Surveys, sampling and case selection

Week 3

Monday, May 27- Probability and t-tests

Crosstab Worksheet Due

Tuesday, May 28 –Reliability and Validity

Wednesday, May 29 – Correlation and Graphical Depictions of Data

Reliability and Probability worksheet due.

Thursday, May 30 – Causality and Experiments

Week 4

Monday, June 3 – Midterm

Wednesday, June 5 –Multivariate Analyses & Qualitative Investigations

Tuesday, June 4 – Content Analysis

Thursday, June 6 –Control Tables

Week 5

*Monday, June 10 – Introduction to Regression
Content Analysis (Qualitative Research) Assignment*

Tuesday, June 11 – Multiple Regression

*Wednesday, June 12 – Dummies and Testing Hypotheses with Regression
Regression Introduction Worksheet Due.*

Thursday, June 13 – Reading and writing research

Week 6

*Monday, June 17 – Logistic Regression
Multivariate Regression Worksheet Due*

Tuesday, June 18 – Regression Diagnostics

Wednesday, June 19 – Theory Building and Testing

*Thursday, June 20 – Review
Regression Analysis Paper Due.*