



## POL222H1F Introduction to Quantitative Reasoning I

University of Toronto Summer Session 2016

POL222H introduces students to the underlying ideas and methods of 'science' and how some questions about politics can be approached by similar means. We will be covering principles of research design and the concepts underpinning statistical inference, building up to reading statistical reports. The course emphasises being able to understand the kinds of descriptive and inferential statistics presented in almost all professional and policymaking jobs, and demonstrates that understanding where they come from can help us all make better decisions.

Class: Tuesdays and Thursdays 1800-2000  
(6-8pm)

Location: Sydney Smith 2110

Tutorials: Sign up during first weeks

Instructor: Iain Wilson

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Office hours: TBA

### Core Text:

Berdahl, Loreen and Keith Archer. 2015. *Explorations, Conducting Empirical Research in Canadian Political Science*, 3<sup>rd</sup> Edition (Don Mills: Oxford University Press). The core text will be available at the bookstore and there should be used copies available on Amazon. OUP has an ebook version.

Other essential readings will be posted on Blackboard. Bryman, Alan, Edward Bell and James Teevan. 2012. *Social Research Methods*, 3<sup>rd</sup> Canadian Edition (Don Mills: Oxford University Press) was runner-up for core text and we are assigning several short extracts.

## Attendance

We appreciate that you have lives outside of class and sometimes things happen unexpectedly. However, unlike some politics courses, much of the material in POL222 is sequential: if you do not understand probability, for example, you will never fully understand regression. We welcome you to consult us in our office hours and to borrow notes for someone if you have to miss class, but these are not adequate substitutes. We want to give you an incentive to come along on crucial weeks and reward effort. To achieve that, I am allocating a small portion of the marks available on the course to participation in seminar groups and in-class quizzes. Please attend scheduled classes and seminars unless you have a very good reason for being absent.

If you cannot come to class please send both me and your TA an email with a brief explanation. Put “Absence”, and only “Absence”, in the subject line. If the explanation is reasonable we will give class average for that day. The standard of explanation needed for missing class is much lower than for other assessments, and we do not need supporting evidence or to know intimate details – simply let us know that you are unwell or have a family emergency. Generally we want to see an email before the end of class if possible, unless you are obviously too sick to send an email.

## University Turnitin Statement

We reserve the right to use Turnitin.com. The following statement appears on the Faculty website:

“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.”

## Writing and referencing

This is an upper-level course and we expect you to be familiar with the conventions of academic writing. There are significant penalties for bad referencing and very serious penalties for plagiarism. The official Faculty position is that **“Plagiarism is a 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>.”**

The writing centres at Innis College, New College, University College, St. Michael's College, Victoria College and Woodsworth College remain open over the summer. For information about writing centre appointments in the summer session, see <http://writing.utoronto.ca/news>.

**Schedule (subject to change at our discretion):**

Class One 10/5/16: Why should you care about research methods?

Requirements: Please come to class having thought about how you would study the possibility of there being purple unicorns on campus, and whether students believe that there are purple unicorns on campus.

Watch the video 'Healthcare Triage #3' 'Sugar doesn't make kids hyper', available at <https://www.youtube.com/watch?v=mkr9YsmrPAI&list=UUabaQPYxxKepWUsEVQMT4Kw&index=63>

Class Two 12/5/16: Ethics and limitations on research methods

*Explorations* Ch6 (available on Blackboard)

Fuji, Lee Ann (2012) 'Research Ethics 101' *PS: Political Science* 45(4) pp717-23

Class Three 17/5/16: Cause and effect

*Explorations* Ch1, 2, 3

Class Four 19/5/16: Descriptive statistics

*Explorations* 97-102 and Ch14 to p276, Bryman Ch13 to p242 (extract on blackboard)

Class Five 24/5/16: Reliable and unreliable data

Bryman Ch5 and *Explorations* Ch4, 5 and watch <http://www.youtube.com/watch?v=FGH2tYuXf0s>

Class Six 26/5/16: **Class Test One**, Relationships and control

*Explorations* 324-331

Class Seven 31/5/16: Criticising research designs

Skim *Explorations* 9, 11, 12

Class Eight 2/6/16: Surveys

*Explorations* Ch10 and Loftus, Elizabeth and Wesley Marburger. 1983. 'Since the eruption of Mt. St. Helens, has anyone beaten you up?' *Memory and Cognition* 11(2) pp114-20

Class Nine 7/6/16: Sampling

*Explorations* Ch8 and Bryman p242-55

Class Ten 9/6/16: Simple inferences and confidence, **Proposal due**

*Explorations* Ch15 to 294 and skim Greenhalgh, Tricia. 2003. *How to Read a Paper*, extracts on blackboard

Class Eleven 14/6/16: Introduction to regression

*Explorations* Ch17 (skim) and Levitt, Stephen and Stephen Dubner (2009) *Freakonomics*, New York: Harper Collins, 'What Makes a Perfect Parent?' extract on Blackboard

Class Twelve 16/6/16: Q&A, **Class test two**

## Course Grading Rules

Marks for this course are allocated as follows:

Tutorials: 10%

Random quizzes: 10%

Research Proposal, due 9<sup>th</sup> of June: 35%

Test One, 26<sup>th</sup> of May: 20%

Test Two, 16<sup>th</sup> of June: 25%

Written assignments should be submitted on paper at the start of class on the due date, so that we have a paper copy by quarter past six. You also need to submit an electronic copy through Blackboard before class. Ideally, of course, we would like you to submit work comfortably before the deadline.

### Deadlines

If you miss an assignment deadline without good reason, we will still accept work up to seven calendar days late without a good excuse, but **we will reduce your mark by 4%** (of the notional maximum) for each calendar day the work is late. Late assignments can be submitted to the office and must be marked with the date. Please be aware that Saturday, Sunday and public holidays are calendar days, even though the office will be closed.

If you believe you have medical or personal circumstances which mean no reasonable person could expect you to submit your assignment on time, please submit a copy of a document which supports this. If the evidence is acceptable, we will remove any late penalties which have been imposed. Please get evidence to me as soon as possible. A properly completed University illness form (<http://www.illnessverification.utoronto.ca>) stating that you could not complete assignments on the relevant dates will always be acceptable, as will evidence of the death of an immediate family member. Otherwise, you should work on the assumption that you risk a significant late penalty unless we tell you otherwise in writing.

## **Instructions**

### **Class tests**

There will be two class tests in this course. The tests will be unseen, closed-book and may cover any material assigned up to that point.

### **Research Proposal**

The main take-home assessment on this course is a 2000-word research proposal. Although you do not need to actually conduct research for this exercise, you need to come up with an empirical research question and a strategy for answering which would convince me to fund your (hypothetical) research. The aim of this exercise is to show that you understand the logical issues involved in empirical research.

You need to

- Identify an empirical question about politics which you could plausibly answer given a maximum \$5000 budget and 200 hours of your own time (while you may hire assistants, you will need to pay them \$15 per hour if they are unskilled and \$40 per hour if they bring special skills)
- Briefly explain the state of existing research
- Choose appropriate methods for finding or gathering data
- Provide draft survey forms, interview scripts, etc. to convince us your findings will be valid
- Justify your choices, based on the material we have covered in the course
- Describe and justify how you allocate your resources
- Address any ethical issues raised by your proposal

We will be discussing this exercise in more detail in class.

In this course, a 2000-word assignment means you should aim to turn in a paper of approximately 2000 words but the word count can fall in the 1800 to 2200 range without being penalised. If a paper exceeds 2200 words we will deduct 1% for every 20 words, or part thereof, over the limit. Please mark the word count on your paper.

### **Participation/quizzes**

The remaining marks will reward consistent attendance and participation in tutorials, plus occasional in-class quizzes on the material covered in the readings. Keep up to date with the course material and do not be tempted to leave everything to the last minute!