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.

Statistics, Lies and Computers
The first half of this class explores the scientific method (formulating hypotheses) and providing an overview of political science research. The second half of the course provides an introduction to statistical analyses. Many students are often reticent about statistics because of concerns that the math will be boring or difficult. The instructor understands, often admits to being bad at math, and vividly recalls having tried to avoid Calculus and classes similar to POL222 as an undergraduate. The approach in this class is designed for everyone to be able to complete some basic analyses and interpret statistical results regardless of their comfort with math. In the process, this class should give students the ability to understand readings they encounter in political science, public policy and related courses with statistical tables, as well as providing a foundation so interested students can take additional courses to master social statistics. As a result, students in POL222 will have a choice between using a spreadsheet like Excel, a free online statistical tool that is very easy to use, or R, an open-source statistical package frequently used by programmers and advanced methodologists. All of these options can be used for free through the university on personal computers (the online tool can be used by anyone with a browser like a tablet).

Lectures, Office Hours, & Tutorials
This section of POL222 is an evening course, designed to accommodate students who work or provide child care during the day. There will not be regular, required tutorials in this class, but we will hold discussions and host sessions focused on helping students understand the concepts in the first half of the course, and complete the statistical worksheets in the second half of the course before each deadline.
**GRADING SCHEME**

<table>
<thead>
<tr>
<th>Assignment</th>
<th>%</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Article Summary</td>
<td>3</td>
<td>May 17</td>
</tr>
<tr>
<td>Worksheets (3)</td>
<td>15</td>
<td>May 17; June 7; June 14</td>
</tr>
<tr>
<td>Midterm</td>
<td>35</td>
<td>May 23</td>
</tr>
<tr>
<td>Final Exam</td>
<td>35</td>
<td>TBA</td>
</tr>
</tbody>
</table>

^ Because this is near the start of the term, the quiz must be completed one week after the readings are covered, on May 14.

**ASSIGNMENT DETAILS**

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

**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 worksheet designed to give you the opportunity to learn how to analyze variables in Excel and/or a free online statistical tool and communicate the relevant descriptive statistics (including central tendencies and measures of dispersion). 5%

*Worksheet 3: Crosstabulations and t-tests.* A worksheet to enable students to refine their ability to complete crosstabulations (“pivot tables” in Excel) and t-tests using Excel, R, or a free online statistical tool. 5%

**Article Summary**

A set of questions on one or two of the academic journal articles we read in class. In a sentence or two, you will report on the important question the article seeks to answer, identify competing perspectives of other scholars, summarize the article’s findings, and describe the methods the author(s) employed to complete their study.

**Exams**

*Midterm.* A multiple choice test administered online on May 21 covering material introduced in class since the beginning of term. Most students will complete this test in under 90 minutes. 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.

**Engagement (Participation)**
To enhance your learning in this course, your engagement with class materials online will provide the basis of a participation mark. These materials include review quizzes on the readings, questions about lectures and readings, participation in online discussions, and attendance at the interview practicum and occasional live webinars. Since this is an online course, regular contributions and questions on-line are expected.

On Quercus, you will find a link to a discussion forum called PeppeR. Students will have the opportunity to share thoughts, apply course concepts to current events and recent editorials, ask and answer questions about the class on discussion forums on Quercus. Remember to interact with respect and civility on the discussion boards. The Code of Student Conduct and The Code of Behaviour on Academic Matters apply to all posts.

There are four categories of engagement:

1) Quizzes. On Quercus, there will be four or five short, 5-10 question “Reading Quizzes” on the readings plus a practice article summary that should be completed within one week of the material covered on the syllabus. Completing each one is worth one point for a maximum of three points regardless of the score you get (most will actually enable you to re-take the quiz until you get the answers correct).

2) Discussions and activities described on syllabus (6 points). Timely engagement of these questions or completion of these activities in a dedicated forum on PeppeR is worth 1.5 points each. The first five weeks’ worth of discussions can be engaged in before the midterm. After that, each engagement will only yield a credit within a week of the related material being presented in class. You can earn up to six points through these discussions and activities.

3) Other/subjective (3). These participation opportunities include additional engagements with participation discussions beyond the maximum, attendance/participation in any in-person discussions, and any other questions and discussions that arise, or are initiated by students on PeppeR. A subjective point may also be added for students who are especially thoughtful in their online engagements.

Students are encouraged to post all questions about the course material and current events on Quercus, in the appropriate discussion forum. These forums will be moderated by teaching assistants and the instructor with the hope of ensuring that every question receives an answer within two business days. Please email the instructor if you are curious about any marks you have received.

**Late Assignments & Adverse Health Circumstances**

Unless explicitly specified, the deadline for all assignments is at 11:59 pm on Quercus. All matters of grading, exemptions, and discipline procedures will be handled in accordance with the U of T Academic Handbook. Late assignments will be penalized 3% per day for the first nine days of lateness following a 72 hour grace period. After ten calendar days of lateness, the teaching assistants and the instructor will refuse to accept the work for grading. We will grant extensions for work, family, child care, or other non-health reasons prior to the deadline or quiz, so please make sure you, or someone you delegate, contacts the instructor or the TA whenever there may be an issue. Students whose health renders them unable to complete an assignment should also contact the professor before deadlines or test administrations under non-exceptional circumstances.
If you become ill and it affects your ability to do your academic work, consult me right away. Normally, I will ask you for documentation in support of your specific medical circumstances. This documentation can be an Absence Declaration (via ACORN) or the University's Verification of Student Illness or Injury (VOI) form. The VOI indicates the impact and severity of the illness, while protecting your privacy about the details of the nature of the illness. If you cannot submit a VOI due to limits on terms of use, you can submit a different form (like a letter from a doctor), as long as it is an original document, and it contains the same information as the VOI (including dates, academic impact, practitioner's signature, phone and registration number). For more information on the VOI, please see http://www.illnessverification.utoronto.ca. For information on Absence Declaration Tool for A&S students, please see https://www.artsci.utoronto.ca/absence. If you get a concussion, break your hand, or suffer some other acute injury, you should register with Accessibility Services as soon as possible.

There may be times when you are unable to complete course work on time due to non-medical reasons. If you have concerns, speak to me or to an advisor in your College Registrar's office; they can help you to decide if you want to request an extension or other forms of academic consideration. They may be able to email your instructors directly to provide a College Registrar's letter of support and connect you with other helpful resources on campus.

Appeals

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 emailed as a formal letter explaining the basis of the appeal to the instructor or the teaching assistant. No appeals will be considered after Monday, June 22 or one week after marks are returned. All other appeals and complaints will be handled in a manner consistent with the regulations described in the handbook.

See http://www.artsci.utoronto.ca/main/faculty/resources/faculty/acaresources for the complete handbook.

Plagiarism & Academic Integrity

Every year, students are caught for plagiarism. This is defined by the University of Toronto’s Code of Behavior on Academic Matters as “the wrongful appropriation and purloining, and publication as one’s own, of the ideas, or the expression of the ideas…of another.”

Normally, students will be required to submit their course essays to the University's plagiarism detection tool 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 tool's reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of this tool are described on the Centre for Teaching Support & Innovation web site (https://uoft.me/pdt-faq).

All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters (https://governingcouncil.utoronto.ca/secretariat/policies/code-behaviour-academic-matters-july-1-2019). If you have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, please reach out to me. Note that you are expected to seek out additional information on academic integrity from me or from other institutional resources. For
example, to learn more about how to cite and use source material appropriately and for other writing support, see the U of T writing support website at http://www.writing.utoronto.ca. Consult the Code of Behaviour on Academic Matters for a complete outline of the University's policy and expectations. For more information, please see A&S Student Academic Integrity (https://www.artsci.utoronto.ca/current/academic-advising-and-support/student-academic-integrity) and the University of Toronto Website on Academic Integrity (https://www.academicintegrity.utoronto.ca).

Quercus

This Course uses the University's learning management system, Quercus, to post information about the course. This includes posting readings and other materials required to complete class activities and course assignments, as well as sharing important announcements and updates. New information and resources will be posted regularly as we move through the term. To access the course website, go to the U of T Quercus log-in page at https://q.utoronto.ca. SPECIAL NOTE ABOUT GRADES POSTED ONLINE: Please also note that any grades posted are for your information only, so you can view and track your progress through the course. No grades are considered official, including any posted in Quercus at any point in the term, until they have been formally approved and posted on ACORN at the end of the course. Please contact me as soon as possible if you think there is an error in any grade posted on Quercus.

Required Readings

Please find textbook-style readings primarily in two on-line, open source methodological textbooks:


The information about social science research methods is what matters, rather than any particular reading. There are many texts that cover similar material, and little is “new.” Students are encouraged to substitute or augment the above texts with most any textbooks on social science methods, especially if students already own the book or have a strong preference for printed materials. For example, the text used during some other terms for POL222 and/or POL232 is recommended (one chapter is required):


There is one required text that we will use during one week that you might purchase:


Additional readings available for free on-line/through the library’s website or on Quercus. Several chapters are drawn from this open-access on-line textbook:

To help guide your reading, I will post a review guide for the midterm and/or a list of key terms. It will often be obvious which chapters from the above texts substitute for the on-line texts, but in the reading schedule below, I will also try 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 Quercus.

**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. Issue or accommodation need, you should register with Accessibility Services (AS) at the beginning of the academic year by visiting https://studentlife.utoronto.ca/department/accessibility-services/. Without registration, you will not be able to verify your situation with your instructors, and instructors will not be advised about your accommodation needs. AS will assess your situation, develop an accommodation plan with you, and support you in requesting accommodation for your course work. Remember that the process of accommodation is private: AS will not share details of your needs or condition with any instructor, and your instructors will not reveal that you are registered with AS.

**Family Care & Involvement**

I know that parents and siblings often face unexpected childcare challenges, and some students have responsibilities caring for elders. If you have children of any age, or responsibility to care for children or elders, you should know that when circumstances require their presence, they are welcome to be present during any lecture or office hours. Other family members who may be interested in coming to class to see how awful this course is may join you periodically as long as there are empty seats in the lecture hall, but tutorials and help sessions should be for students only.

**Equity**

The University of Toronto is committed to equity, human rights and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect where all members of our community can express themselves, engage with each other, and respect one another’s differences. U of T does not condone discrimination or harassment against any persons or communities.

**TOPIC SCHEDULE**

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

*This is a partial list of the required readings. A full list of required readings and recommended alternative textbook chapters will be confirmed before the first day of class with the completion of the full syllabus.*
Week 1

1A: **Scientific Method & Introduction** (Live but recorded using Blackboard Collaborate Ultra on Quercus at 6 pm on Tuesday, May 5)

Bhattacherjee, Ch. 1


1B: **Scientific and other forms of knowledge*** (video)


Bueno De Mesquita, Ethan and Anthony Fowler. *Thinking Clearly in a Data-Driven Age*, Draft manuscript, March 29, 2019, Ch. 1


May 10  **Discussion on Quercus:** 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 Quercus for participation credit by midnight on Monday, 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.

Week 2

2A: **Causality**


[Blackstone, Amy] *Principles of Sociological Inquiry* Saylor Foundation

https://www.saylor.org/site/textbooks/Principles%20of%20Sociological%20Inquiry.pdf, pp. 54-59


Recommended: Story Behind the Songs: Silver Springs Fleetwood Mac https://www.youtube.com/watch?v=lfEOOqC-10
2B: Experiments and Control*

Note: the following articles are all examples of research using experiments and/or statistical controls. You should read (or skim) these articles to know a) their main hypothesis/finding, b) the authors’ research design (what the authors did to test their hypotheses), and c) a sense of some of the variables they sought to control for in their analyses.

Bhattacherjee, Ch. 10


May 17: Worksheet 1: Hypotheses due at 11:59 pm on Quercus.

Article Summary on Fried due at 11:59 pm on Quercus.

Week 3

3A: Operationalization and Measurement

Bhattacherjee, Ch. 6 & 7


Pommier, Elizabeth, Kristin D. Neff, and István Tóth-Király. "The development and validation of the Compassion Scale." Assessment 27, no. 1 (2020): 21-39, especially Table 1 (page 23)
https://journals.sagepub.com/doi/pdf/10.1177/1073191119874108

Engagement: Fuzzy Concepts Operationalization & Measurement; In five questions or less, how would you measure [PeppeR]:

a. social class on a public opinion survey of current UTSC students? OR

b. tolerance for different political beliefs on a contentious issue like Quebec’s Bill 21? OR

c. Recently, there has been much talk about populist leaders like Donald Trump or Hugo Chavez. How would you measure support or sympathy for populism, especially the view that “elites” have contributed to many of a country’s current problems in less than five questions?
May 23  Midterm

Week 4

4A:  Identifying (and getting through) lies, BS and knowledge


*Engagement: [A] Really BS Exercise: Find a recent column, op-ed or social media rant published since January 1, 2010 and evaluate the argument(s) made by the author in light of Frankfurt’s analysis. Do you suspect that the author conforms to Frankfurt’s expectations of someone who is likely inclined to BS? Why? What systematic or scientific research might be able to be completed to test the author’s claims (or has such research already been carried out)? You are especially encouraged to be alert to arguments made during the US election campaign. Do not duplicate other postings, but you may post a competing analysis in the same thread for full credit.*

4B  Evaluating arguments; differentiating between popular and political science.


*Engagement: How would Blaydes and Linzer’s work inform a new op-ed about how to best engage Iran (or Iranians) to persuade their leadership to limit their nuclear development?*

Week 5

5A:  Descriptive Statistics

Bhattacherjee, Ch. 14


5B:  Bivariate Relationships + Probability and Sampling*

Jenkins-Smith, H. et al. Ch. 4-5.3; Jenkins-Smith, H. et al. Ch. 5.4-6

**June 7 Worksheet: Descriptive Statistics** due at 11:59 pm on Quercus.

**Week 6**

**6A:** Understanding Control

TBA

**6B:** Reading Advanced Analyses*


**June 14 Worksheet: Crosstabulations** due at 11:59 pm on Quercus.