Course Description

This course provides MA students with an introduction to the principles of research design. We cover the fundamentals of the scientific method, with a particular emphasis on the different strategies that scientists utilize to infer meaningful conclusions from the observations they make about the world. Topics include: causal inference and the potential outcomes framework; experimental, observational and quasi-experimental research designs; approaches to case selection in both quantitative and qualitative research; theory building; and ethics in research.

The knowledge acquired in this course prepares students to conduct scientific analysis during their professional careers. Whether they aspire to work in the private sector, government or pursue an advanced academic degree, by the end of this course, students will have gained a solid understanding of how to conduct sound and reliable empirical research. The course also provides a useful foundation for undertaking advanced methods courses.

Course Format

The course adopts a seminar format. Most classes will involve discussions of readings and concrete examples from the literature, with an active contribution from all students. However, some classes will contain a presentation from the instructor to introduce an advanced topic, before moving to the usual class discussion. Topics and activities for each week are listed below.

Classes take place IRL (“in real life”). Please remain wary that in the case of a new wave of coronavirus that would require social distancing, we may have to convert the class to an online format. In such an eventuality, I will make sure that the transition is as seamless as possible.
Readings

The required readings for this course comprise a seminal text on research design and additional papers or book chapters. These additional papers and chapters will be provided on Quercus.

Principal required reading:


This reading can be bought or borrowed in electronic format at VitalSource. It is also available at the UofT Bookstore. Copies should be easy to find elsewhere, such as used bookstores, Amazon, the web, and the Robarts library.

Marking Scheme

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>%</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation</td>
<td>15%</td>
<td>Throughout the semester</td>
</tr>
<tr>
<td>Reading summary</td>
<td>20%</td>
<td>October 5, 19, or 26, 2022</td>
</tr>
<tr>
<td>Research design proposal</td>
<td>10%</td>
<td>November 2, 2022</td>
</tr>
<tr>
<td>Peer feedback x2</td>
<td>10%</td>
<td>November 16, 2022</td>
</tr>
<tr>
<td>In-class presentation</td>
<td>15%</td>
<td>November 23–December 7, 2022</td>
</tr>
<tr>
<td>Final research design</td>
<td>30%</td>
<td>December 9, 2022</td>
</tr>
</tbody>
</table>

This is a graduate course and the final grades are letter only. The late penalty for written work is 2% per day, including weekends.

Breakdown of marking scheme and assignments

Participation

Since the class is organized as a seminar, a portion of the marking scheme is reserved for presence and active participation during weekly classes. This component represents 15% of the final grade. Students are expected to lead the discussion during specific weeks (see Reading summary section below).

Reading summary

For the reading summary, choose a reading in the section marked “Readings for assignment” for one of the following three weeks: October 5, 19 or 26. Summarize the research design used by the author(s) of your selected reading, and provide a critical assessment of that design, ideally by comparing to other texts for the week, previous readings, or external literature that may be relevant. The reading summary should be about two pages long, and submitted for the class on the selected week. Students are expected to open the discussion on the reading they chose during the second half of the class, for the corresponding week.
**Research design proposal**

Students are invited to submit the first draft of a research design proposal by November 2. This is a two-page draft that states a research question, gives an overview of how you plan to answer it, and some sense of the methods and cases/data you plan to rely on. Students may opt to work on the project they have in mind for the MA thesis seminar. Students may also choose to work in a team.

**Peer feedback x2**

Students will be required to submit short, constructive feedback on proposals from two classmates on Quercus by November 16. Each written feedback is worth 5% of the grade.

**In-class presentation**

The last weeks of the semester are reserved for presentations in class. Each student (or team) will be invited to present their work orally, and will receive live feedback from the instructor and from the rest of the class.

**Final research design**

At the end of the semester, students submit the finalized version of their research design. It should be written like the first part of an empirical research paper, with an introduction, a literature review that highlights gaps in knowledge or anomalies, the research question and possibly working hypotheses, with a description of your intended research design. The final research design is five pages long.
Class Schedule

Note that the schedule below could be modified slightly during the semester due to unforeseen circumstances or progress.

September 14: Course introduction

- **Topics:**
  - Introductions.
  - Logistics of the course.
  - Overview of course contents and objectives.
- **Format of the class:**
  - Interactive discussion.

September 21: The scientific method

- **Topics:**
  - Steps of the scientific method.
  - Refresher on linear regression and notation.
- **Format of the class:**
  - Moderated class discussion of core readings (first half), followed by instructor presentation and interactive discussion about regression and notation (second half).
- **Core readings:**
  - KKV, Ch. 1.
  - Kellstedt and Whitten, Ch. 1.
  - Lecture notes.
- **Homework:**
  - Examples of literature reviews:
    - Hainmueller and Hopkins. 2014. “Public Attitudes Toward Immigration.”

September 28: Causal inference

- **Topics:**
  - Causal inference.
  - Potential outcomes framework.
- **Format of the class:**
  - Instructor presentation on potential outcome framework (first half), followed by open class discussion on core readings (second half).
- **Core readings:**
  - KKV, Ch. 3
- **Optional reading:**
  - KKV, Ch. 2 (Descriptive inference)
October 5: Experimental designs

- **Topics:**
  - Laboratory and field experiments.
  - Internal and external validity.
  - Examples of experimental designs in political science.

- **Format of the class:**
  - Class discussion of core reading (first half), followed by student-led discussion of specific examples of applications (second half).

- **Core reading:**

- **Readings for assignment:**
  Choose one of these readings for the reading summary.
  - Tomz. 2007. “Domestic Audience Costs in International Relations.”

- **Reading summary due today (Option 1 of 3).**

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October 12: Case selection

- **Topics:**
  - Case selection.
  - Comparative method.
  - Selection biases.

- **Format of the class:**
  - Class discussion of core readings (first half), interactive discussion on individual projects (second half).

- **Core readings:**
  - KKV, Ch. 4

- **Recommended reading:**
  - Seawright and Gerring. 2008. “Case-Selection Techniques in Case Study Research: A Menu of Qualitative and Quantitative Options.”

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October 19: Observational research designs

- **Topics:**
  - Non-experimental (observational) research designs.
  - Case studies.

- **Format of the class:**
  - Class discussion of core readings (first half), followed by student-led discussion of specific examples of applications (second half).
• Core readings:
  ◦ Mahoney. 2007. “Qualitative Methodology and Comparative Politics.”

• Readings for assignment:
Choose one of these readings for the reading summary.
  ◦ Abadie, Diamond and Hainmueller. 2015. “Comparative Politics and the Synthetic Control Method.”

• Reading summary due today (Option 2 of 3).

October 26: Quasi-experimental research designs

• Topics:
  ◦ Quasi-experimental methods.
  ◦ Instrumental variables.
  ◦ Matching.

• Format of the class:
  ◦ Class discussion of core reading (first half), followed by student-led discussion of specific examples of applications (second half).

• Core reading:
  ◦ Ritter and Conrad. 2016. “Preventing and Responding to Dissent.”

• Readings for assignment:
Choose one of these readings for the reading summary.
  ◦ Eggers and Hainmueller. 2009. “MPs for Sale?”

• Reading summary due today (Option 3 of 3).

November 2: Theory building and measurement

• Topics:
  ◦ Theory building.
  ◦ Hypotheses.
  ◦ Measurement, from concepts to variables.

• Format of the class:
  ◦ Class discussion of core readings (first half), followed by short instructor presentation and interactive discussion (second half).

• Core readings:
  ◦ Kellstedt and Whitten, “The Art of Theory Building.”
  ◦ Lecture notes.

• Optional reading:
  ◦ KKV, Ch. 5-6.

• Research design proposal due today.
November 9: Reading week

No class.

November 16: Ethics and replicability

- **Topics:**
  - Human subjects, ethics in research and institutional review boards.
  - Transparency and replicability.
  - Finding data.
- **Format of the class:**
  - Class discussion of core readings (first half), open class discussion and Q&A about finding research data and resources (second half).
- **Core readings:**
  - Monogan. 2015. “Research Preregistration in Political Science”
- **2x peer feedback on proposals due today.**

November 23, November 30, December 7: Student presentations

Final research design due on December 9.
Policies

Illnesses and late work

The University of Toronto launched a unique and centralized tool to report illnesses and other situations leading to absences, the Absence Declaration. For any situations affecting your ability to complete term work in time (COVID, cold, flu, other illness or injury, family situation), please fill in the Absence Declaration on ACORN. You will be able to save a copy. Attach the copy of your Absence Declaration to your work, and it will be taken into consideration.

The procedure is as simple as that. There is no need to contact the instructor about illnesses or mention the details of a medical situation. Everything is done using the online Absence Declaration.

Plagiarism

To ensure a fair evaluation for all students, the University has strict guidelines regarding plagiarism. Please make sure to consult the University’s documentation on plagiarism to avoid any unpleasant experiences. In particular, this guide is a useful reference:

https://advice.writing.utoronto.ca/using-sources/how-not-to-plagiarize/

Similarity Detection Software

Submission of written work to Ouriginal, UofT’s similarity detection tool, is done when uploading it to Quercus. The statement of the University regarding the use of Ouriginal reads as follows:

“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).”