POLI 3492 Political Inquiry I
Dalhousie University, Winter 2020
Mondays and Wednesdays, 2:35-3:55
Dunn 301A

Instructor: Anders Hayden
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Course Description
This course is a general introduction to empirical research methods in political science and the social sciences more generally. It assumes no prior experience in this area. It covers a range of issues that are relevant to all kinds of empirical research, but the focus is on quantitative strategies (i.e., statistical analysis). Students will learn to understand the logic and assumptions behind statistical analyses, and gain practice with those methods to answer specific research questions using the statistical software package SPSS.

This course involves a fair amount of mathematical language, but it is really less about mathematics than it is about thinking logically about the research process and how to test knowledge claims. Assignments keep the mathematics to a minimum necessary to understand key concepts. The goal is to understand quantitative analysis as a series of strategic/analytical choices. In other words, “I have this kind of problem. Which quantitative technique should I use, and how do I interpret the results?”

Course Format: Lectures and Lab Sessions
This is primarily a lecture course. There will be some overlap between the lectures and assigned readings, which is necessary to work through some of the more challenging concepts. However, lectures do not substitute for the readings and the readings do not substitute for the lectures. Students who do the assigned reading before class will have an easier time following the lecture and will likely do better on assignments and exams. (That is the case in all courses, but particularly so in this course, given the nature of the subject matter.)

If you find media articles related to course themes—i.e., which deal with the use of statistics in political debates or other social issues—that you would like to discuss in class, you are encouraged to bring them to the instructor’s attention.

Four of the classes will be computer lab sessions (see “Weekly Themes and Readings” below), where students will work semi-independently on small assignments using SPSS software. Lab instructions will be available on the course website. Lab sessions are scheduled to take place on February 3, February 24, March 9, and March 23. The lab schedule is subject to change—labs may take place later than scheduled if we have not yet covered enough material in class.

Textbook, Readings on Brightspace, and Library Reserves
The course has a required book available at the university bookstore:

The ninth edition of the textbook has been substantially revised. Some ideas are presented in a different order, while other important concepts have been excluded from the new edition. As I further discover the differences from past editions, I may need to add some additional reading on brightspace to supplement what is in the textbook.

I sympathize with anyone who feels that the textbook is expensive. If you want to keep costs down, you will likely be able to find used copies from online sources such as amazon.ca, where a lower cost kindle version is also available. However, if you buy a used copy, it will be more convenient for you if you get the ninth edition—earlier editions will be similar, but the content and required pages will not be identical.

Links to readings not in the ninth edition of the textbook will be provided on Brightspace.

Some recommended readings are taken from the books listed below, which are available on reserve in the Killam Library. (In addition to the recommended sections below, you may find the texts by Brians et al. and Berdahl & Archer text to be useful if you are looking for a more basic introduction than you will find in the textbook for some of the statistical concepts).


Software and Computer Access

We will be using software called Statistical Package for the Social Sciences (SPSS), a.k.a. IBM SPSS Statistics. SPSS is installed on the computers in the all of the student computer labs on campus. SPSS is also available on computers in the Library Learning Commons (located in the Killam, Kellogg, and Sexton libraries).

Back Up Your Work!

Be careful to make back-up copies of work-in-progress and update them frequently, particularly when working with large datasets (see below). Computer problems will only be accepted as an excuse for late or incomplete assignments in truly exceptional circumstances. If you have hardware or software problems, contact the Help Desk: http://www.dal.ca/dept/its/helpdesk.html.

Datasets

We will work with datasets, including:
You will have access to these datasets on the T drive on all university computers.

**TA Availability**

There are no tutorial sessions for this class, but the TA will hold office hours during key times, e.g., the week before the midterm and the final week of class. *(This assumes that a TA is assigned to the class. If not, the instructor will inform you of a Plan B for grading the short assignments).*

**Requirements and Grading**

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percentage</th>
<th>Due Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Assignments (4)</td>
<td>15%</td>
<td>Jan. 20, Feb. 3, Mar. 9, Mar. 23</td>
</tr>
<tr>
<td>Midterm</td>
<td>25%</td>
<td>February 12, in class</td>
</tr>
<tr>
<td>Preliminary outline for data analysis paper</td>
<td>5%</td>
<td>March 20</td>
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<tr>
<td>Data analysis paper</td>
<td>25%</td>
<td>April 3</td>
</tr>
<tr>
<td>Final exam</td>
<td>30%</td>
<td>Exam period, April 8-24</td>
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</tbody>
</table>

*N.B. The requirements and grading may have to be revised if a TA is not assigned to the course.*

**Short Assignments**

There will be four short assignments. They include a set of questions designed to test your understanding of basic concepts from lectures and readings and/or to provide experience with particular techniques. Assignments will be available on Brightspace. They should be submitted online through the “Assignments” area of the website. *Due dates may be pushed back, depending on how quickly we progress through the course material.*

Assignments submitted after the due date are subject to late penalties. They must be submitted within one week of the due date (i.e., after one week the late penalty is 100%) so that graded assignments and the answer key can be released to students.

**Optional Quizzes**

There is a quiz associated with each chapter of the textbook, available at: [https://edge.sagepub.com/johnson9e](https://edge.sagepub.com/johnson9e) (click on the chapter you want and then click on “Quiz”). These quizzes are not required and will not be graded, but you may find them useful to assess your level of understanding of the main concepts. They will also be useful to review concepts before exams, although they do not cover all the ideas that you will need to know.

**Midterm Exam**

In-class, February 12. The exam will test the ability to understand and apply basic concepts, techniques, and methodological issues/strategies. More information on the content and format of the exam will be made available in class prior to the exam. The midterm will cover all of the material raised in lectures and assigned readings up to, and including, the class of February 10.
Final Exam

The final exam will cover material from the entire semester. The final exam period is April 8-24. *Do not make end-of-semester travel plans until you know the date of the final exam.* The Registrar’s office will release the exam schedule on February 4.

Data Analysis Paper (DAP)

Students will work in pairs to perform statistical analysis and write a report explaining their research plan and results. Each student should find his or her own partner and notify me by February 5. Students can only work on their own with special permission.

The DAP is intended to test students’ capacity to apply what they have learned by identifying and pursuing a specific research problem.

Basic steps in the process:

1. Decide which **dataset** you want to work with. The main option is to work with the ARDA Cross-National Socio-Economic and Religion dataset, which is a compilation of data from various sources including the UN Human Development Reports and the CIA World Factbook. If you wish to work with another dataset, you should ask the instructor for permission. As you decide on a dataset, keep in mind both your interest in the subject matter of the dataset and the types of analysis that will be available given the levels of measurement of the variables (nominal, ordinal, interval or ratio).

2. Look through the data to identify **variables** that you might use to build a working hypothesis. It will help to start by looking for a **dependent variable** that seems interesting. Once you have your dependent variable, what kinds of other variables can you find in the data that might plausibly be seen to influence your dependent variable? (In other words, can you find some potential causes for your effect?)

3. Formulate a clear **hypothesis**.

4. Identify **control variables**, and **alternative hypotheses**, where appropriate.

5. Look in the scholarly **literature** for theory and research which is relevant to your hypothesis (i.e. research into the variables that affect your **dependent** variable). Do people argue about what causes variation in your dependent variable? If so, what are the rival theories? Which variables are often introduced as key independent or control variables? Where appropriate, go back and reconsider/reformulate what you have for steps 1-4, above. (If you are having trouble getting ideas for steps 3 and 4, you may find it helpful to jump to step 5 and look in the literature for possible hypotheses to test and variables to include.)

6. Think about whether any **measurement issues** might exist with your variables. What do you know about how your variable was measured? What do you not know? How might this matter?

7. Choose the right kind of statistical **analysis** for your variables—and get SPSS to do that analysis for you.

8. **Interpret** the results. Was your working hypothesis supported, or undercut, by what you found? (It’s ok if your hypothesis was not supported—discovering that a hypothesis is not
supported by the available evidence is a key part of the advancement of knowledge.) What does this mean in terms of theoretical debates? What does this mean in terms of policy recommendations?

9. Write up a brief report (2000-3000 words, not including tables and graphs), presenting and explaining your research question, strategy, and results.

Every data analysis paper should have the following components:
1. a brief statement of the research problem (about ½ page)
2. a brief review of relevant scholarly literature (about 1 page)
3. a statement of the working hypothesis or hypotheses (about ¼ page)
4. an explanation of the research design, explicitly identifying independent, dependent, and control variables, some discussion of measurement and sampling issues, and a brief description and justification of the data analysis techniques chosen (3 pages)
5. a discussion of the data analysis results (about 2 ½ pages)
6. a brief discussion of theoretical and policy implications of the results (about ½ page)
7. a brief agenda for further research (about ½ page)

These are guidelines only. You don’t have to do things exactly in this order. Particular sections might be a little shorter or a little longer. The most important thing is that you cover each of these different steps and explain each step carefully.

When writing up your report, refer to the assigned readings for March 25 on “Interpreting and Presenting Your Own Results” (you may want to read ahead so that you do not leave the write-up until the last minute). You might also get some ideas about how to organize your report from the structure of other quantitative journal articles you have read, including those on the syllabus (e.g. Segal and Cover; York, Rosa, and Dietz). But keep in mind that for the purposes of this course, you need to make the steps you took in the process more transparent than in most published papers (i.e., just like in high-school math, you need to show your work).

By March 20, each pair of students must hand in a short report (one-page) on their DAP progress to date, outlining the proposed question, working hypothesis, dependent and independent variables (including control variables), the statistical procedure(s) you intend to use, and a preliminary bibliography.

The final version of the DAP is due on April 3.

**Deadlines and Late Penalties**

Any assignment received after the due date will be subject to a late penalty of 5% per day, unless appropriate written documentation is provided. Please plan your work well ahead of time to avoid this. Note that the four short assignments must be submitted within one week of the due date (i.e. the late penalty is 100% after 7 days), at which time graded assignments will be returned to students.

**Heads Up**

This is a relatively heavy course with a lot of reading and assignments. It is important that you keep up with concepts along the way—if you miss key ideas at the beginning, then it will be hard to understand the statistical methods that we cover later. You will be lost and it will
not be easy to catch up. If you allow yourself to fall too far behind, failing the course will become a likely outcome. On the other hand, if you keep up with the readings and the assignments, and ask questions if anything is unclear, you should be able to do well in the course, even if you do not have any background in statistics.

The amount of reading goes down after the first month, but it is replaced by a lot of self-guided work on the data analysis paper. It is your responsibility to manage your time effectively. **Do not leave work to the last minute.**

**Class Schedule (subject to change)**

**January 6: Introduction: Why did they make you take this class, i.e., why do methods and statistics matter?**

*Required:*

Miller, Laura. 2015. “What Are the Odds? To learn to think critically, take a statistics class.” *Slate*, August 31.
http://www.slate.com/articles/life/classes/2015/08/take_a_statistics_and_probability_class_in_college_to_improve_critical_thinking.html

**January 8: What does it mean to study politics "scientifically?"**

*Required:*


*Recommended:*

**January 13: Beginning the Research Process**

*Required:*

During the January 13 class, we will likely start to cover some of the points in the reading for January 15 as well. You may want to read ahead.

**January 15: Hypotheses, Concepts, Variables, and Measurement**

PSRM, Chapter 4, “The Building Blocks of Scientific Research,” pp. 73-96.

*Recommended:*

January 20: Population and Samples
Assignment #1 due

Required:

January 22: Research Design

Required:

January 27: Univariate Analysis I

Required:

January 29: Univariate Analysis II / Statistical Inference

Required:

January 31: Last day to withdraw from a winter course without a “W”

February 3: LAB 1: Univariate Analysis
Assignment # 2 due.

February 5: Bivariate Analysis I: Crosstabs
Deadline to inform the instructor of your choice of partner for the Data Analysis Paper.

Required:

February 10: Bivariate Analysis II: Difference of Means Tests

Required:

February 12: Midterm Exam, In Class

February 17 and 19: Study Break (No Classes)
February 24: LAB 2: Bivariate Cross Tabs, T-Test, & Simple ANOVA

February 26: Introduction to Bivariate Regression

Required:
PRSM Chapter 14, “Regression,” pp. 307-319

March 2: Bivariate Regression, continued

Required:


March 4: TBA / Day to Catch Up on Material

March 9: LAB 3: Bivariate Regression
Assignment #3 due
Last day to withdraw from a winter term course with a “W”

March 11: Multivariate Analysis I: Multivariate Crosstabs

Required:

March 16: Multivariate Analysis II: Introduction to Multiple Regression

Required:
PSRM Chapter 14, “Regression,” pp. 319-324.

March 18: Multivariate Analysis III: Multiple Regression, continued

Required:

PSRM, “Maximum Likelihood Models for Dichotomous Dependent Variables,” pp. 324-328. [The instructor will determine if there is sufficient time to cover this section on logistic regression.]

March 20: Preliminary outline for DAP due (no class today)

March 23: LAB 4: Multiple Regression
Assignment #4 due
March 25: Interpreting and Presenting Your Own Results

*Required:*


N.B. For your DAPs, you might also want to review PSRM, Chapter 3, Pp. 54-69 for ideas about how to approach your literature review.

March 30: Research Ethics

In-class videos on Tuskegee, Milgram, and/or Zimbardo experiments.

*Required:*

April 1: Review Session for final exam

April 3: No Class / Data Analysis Paper due.

Section B: University Policies, Statements, Guidelines and Resources for Support

This course is governed by the academic rules and regulations set forth in the University Calendar and the Senate, available at [https://academiccalendar.dal.ca/Catalog/ViewCatalog.aspx?pageid=viewcatalog&catalogid=81&chapterid=4424&loaduseredits=False](https://academiccalendar.dal.ca/Catalog/ViewCatalog.aspx?pageid=viewcatalog&catalogid=81&chapterid=4424&loaduseredits=False)

*University Statements*

*Territorial Acknowledgement:*
Dalhousie University is located in Mi’kma’ki, the ancestral and unceded territory of the Mi’kmak. We are all Treaty people.¹

*Academic Integrity*
At Dalhousie University, we are guided in all of our work by the values of academic integrity: honesty, trust, fairness, responsibility and respect. As a student, you are required to demonstrate these values in all of the work you do. The University provides policies and procedures that every member of the university community is required to follow to ensure academic integrity.

¹ For more information about the purpose of territorial acknowledgements, or information about alternative territorial acknowledgements if your class is offered outside of Nova Scotia, please visit [https://native-land.ca/](https://native-land.ca/).
What does academic integrity mean?

At university we advance knowledge by building on the work of other people. Academic integrity means that we are honest and accurate in creating and communicating all academic products. Acknowledgement of other people’s work must be done in a way that does not leave the reader in any doubt as to whose work it is. Academic integrity means trustworthy conduct such as not cheating on examinations and not misrepresenting information. It is the student’s responsibility to seek assistance to ensure that these standards are met.

How can you achieve academic integrity?

We must all work together to prevent academic dishonesty because it is unfair to honest students. The following are some ways that you can achieve academic integrity; some may not be applicable in all circumstances.

• Make sure you understand Dalhousie’s policies on academic integrity (http://academicintegrity.dal.ca/Policies/)
• Do not cheat in examinations or write an exam or test for someone else
• Do not falsify data or lab results
• Be sure not to plagiarize, intentionally or unintentionally
• Clearly indicate the sources used in your written or oral work. This includes computer codes/ programs, artistic or architectural works, scientific projects, performances, web page designs, graphical representations, diagrams, videos, and images
• Do not use the work of another from the Internet or any other source and submit it as your own
• When you use the ideas of other people (paraphrasing), make sure to acknowledge the source
• Do not submit work that has been completed through collaboration or previously submitted for another assignment without permission from your instructor (These examples should be considered only as a guide and not an exhaustive list.)

Where can you turn for help?

If you are ever unsure about any aspect of your academic work, contact me (or the TA). Other resources:

• Academic Integrity website http://academicintegrity.dal.ca/
Links to policies, definitions, online tutorials, tips on citing and paraphrasing
• Writing Centre (http://www.dal.ca/campus_life/student_services/academic-support/writing-and-study-skills.html)
Assistance with learning to write academic documents, reviewing papers for discipline-specific writing standards, organization, argument, transitions, writing styles and citations
• Dalhousie Libraries Workshops (http://libraries.dal.ca/)
Online tutorials, citation guides, Assignment Calculator, RefWorks
• Dalhousie Student Advocacy Service (http://studentservices.dal.ca/services/advocacy.html)
Assists students with academic appeals and student discipline procedures.
What will happen if an allegation of an academic offence is made against you?

As your instructor, I am required to report every suspected offence. The full process is outlined in the Faculty Discipline Flow Chart (https://cdn.dal.ca/content/dam/dalhousie/pdf/dept/university_secretariat/FDPflowchartSEpt2016.pdf) and includes the following:

• Each Faculty has an Academic Integrity Officer (AIO) who receives allegations from instructors
• Based on the evidence provided, the AIO decides if there is evidence to proceed with the allegation and you will be notified of the process
• If the case proceeds, you will receive a PENDING grade until the matter is resolved
• If you are found guilty of an offence, a penalty will be assigned ranging from a warning, to failure of the assignment or failure of the class, to expulsion from the University. Penalties may also include a notation on your transcript that indicates that you have committed an academic offence.

If you have any questions about academic integrity and plagiarism, please ask.

Accessibility

The Student Accessibility Centre is Dalhousie's centre of expertise for student accessibility and accommodation. The advising team works with students on the Halifax campus who request accommodation as a result of: a disability, religious obligation, or any barrier related to any other characteristic protected under Human Rights legislation (NS, NB, PEI, NL).

If there are aspects of the design, instruction, and/or experiences within this course that result in barriers to your inclusion please contact the Study Accessibility Centre: https://www.dal.ca/campus_life/academic-support/accessibility.html

Please note that your classroom may contain accessible furniture and equipment. It is important that these items remain in the classroom, undisturbed, so that students who require their use will be able to fully participate.

Student Code of Conduct

Everyone at Dalhousie is expected to treat others with dignity and respect. The Code of Student Conduct allows Dalhousie to take disciplinary action if students don’t follow this community expectation. When appropriate, violations of the code can be resolved in a reasonable and informal manner—perhaps through a restorative justice process. If an informal resolution can’t be reached, or would be inappropriate, procedures exist for formal dispute resolution. (read more: https://www.dal.ca/dept/university_secretariat/policies/student-life/code-of-student-conduct.html)

Diversity and Inclusion – Culture of Respect

Every person at Dalhousie has a right to be respected and safe. We believe inclusiveness is fundamental to education. Dalhousie is strengthened in our diversity and dedicated to achieving
equity. We are committed to being a respectful and inclusive community where everyone feels welcome and supported, which is why our university prioritizes fostering a culture of diversity and inclusiveness. Read more: https://www.dal.ca/cultureofrespect.html

**University Policies and Programs**

Important Dates in the Academic Year (including add/drop dates)  
http://www.dal.ca/academics/important_dates.html

Dalhousie Grading Practices Policy  
https://www.dal.ca/dept/university_secretariat/policies/academic/grading-practices-policy.html


Scent-Free Program  https://www.dal.ca/dept/safety/programs-services/occupational-safety/scent-free.html

**Learning and Support Resources**

General Academic Support – Advising  https://www.dal.ca/campus_life/academic-support/advising.html

Student Health & Wellness Centre  https://www.dal.ca/campus_life/health-and-wellness.html

On Track (helps you transition into university, and supports you through your first year at Dalhousie and beyond)  https://www.dal.ca/campus_life/academic-support/On-track.html

Indigenous Student Centre  https://www.dal.ca/campus_life/communities/indigenous.html

Elders-in-Residence (The Elders in Residence program provides students with access to First Nations elders for guidance, counsel and support. Visit the office in the Indigenous Student Centre or contact the program at elders@dal.ca or 902-494-6803.)  

Black Student Advising Centre:  https://www.dal.ca/campus_life/communities/black-student-advising.html

International Centre  https://www.dal.ca/campus_life/international-centre.html

South House Sexual and Gender Resource Centre  https://southhousehalifax.ca/

LGBTQ2SIA+ Collaborative -  https://www.dal.ca/dept/hres/education-campaigns/LGBTQ2SIA-collaborative.html

Library  http://libraries.dal.ca

Copyright Office  https://libraries.dal.ca/services/copyright-office.html

Dalhousie Student Advocacy Services  http://dsu.ca/dsas

Dalhousie Ombudsperson  https://www.dal.ca/campus_life/safety-respect/student-rights-and-
responsibilities/where-to-get-help/ombudsperson.html

Human Rights and Equity Services https://www.dal.ca/dept/hres.html

Writing Centre https://www.dal.ca/campus_life/academic-support/writing-and-study-skills.html

Study Skills/Tutoring: https://www.dal.ca/campus_life/academic-support/study-skills-and-tutoring.html

Faculty or Departmental Advising Support: See https://www.dal.ca/faculty/arts/programs.html for links to departmental websites and information about advising