Course Description

This course is a general introduction to empirical research methods in political science and the social sciences more generally. Students will gain "hands-on" experience in the understanding of basic statistics and the use of the computer in social science research. Emphasis will be placed on pragmatic understanding of the ubiquitous political phenomena of opinion polling, predictions of election results, and quantitative statistical analysis regularly found in contemporary Political Science journals. The tools learned in this course may broaden employment opportunities and/or offer an introduction to post-graduate research method courses. Aimed at the basic level, no prior mathematical or computer skills are assumed or required. Furthermore, the emphasis will be on a practical, "user-friendly," intuitive understanding of the statistical processes rather than on learning the math behind them.

The basic statistics will be taught using two statistical computer programs. The first "Microcase" for Windows is a very simple, user-friendly program that comes with the textbook and includes several data sets. The student can download and run the software on their own computer 24/7. The second program is called Statistical Package for the Social Sciences (SPSS), a.k.a. IBM SPSS Statistics. It will be used in conjunction with Canadian Election Survey (CES) data sets. Instruction in the use of both programs will be conducted in class lectures [but it may be necessary to schedule a special session in a computer lab later.]

SPSS is installed on the computers in all of the student computer labs on campus including the Library Learning Commons (located in the Killam, Kellogg, and Sexton libraries). These labs are not open 24 hours a day so plan accordingly. For more details on the location and opening hours of the labs, see:


Given the sequential nature of the material, students should adopt the method they would use in learning a foreign language -- keeping up with more smaller assignments than found in a typical PS lecture course. If you fall behind, or try to skip step 2 or 3, you're less likely to understand step 4 and all remaining steps. Therefore coming to class, doing the assignments and seeking help if don't understand is very important. The research paper and examinations are due on the dates given. Late research papers are assessed a penalty per day late. [More on this paper later.] Make up exams are usually not given and may be tougher than the original. The Final Exam will be during the time in Dec reserved for Exams. Do not buy tickets or plan to leave campus before the period of exams ends or a specific date has been assigned.

Textbook:

Note: you also need the accompanying Windows software, Microcase, so a used copy of the book, may not be a good idea.

Articles with links on Brightspace -


On reserve:


The final grade will be based on:

- Six small assignments 20%
- Quiz (19th Oct) 20%
- Final exam TBA 35%
- Research paper (23rd Nov) 20%
- Class Participation 5%

Class Schedule (very much subject to change)

5 Sep - Introduction - how important are statistical methods in PS today? We’ll examine on-line several important journals for examples

The First Great Methods Debate
7 Sep - Traditional versus Behavioural
Modes of the traditional research -Historical, Institutional, Legal, and Normative

R.A. Rhodes, "The Institutional Approach", in M&S, chpt 2. - required [REQ]

12 Sep - The Scientific Approach
Behaviour and quantitative methods
LeRoy [Roy] Chp 1. Install Microcase and try Worksheet [wkt] 1 on your own
14 Sep – Objections to science from the first debate. Begin Measurement. 
Roy Chp 2. - Measurement [REQ]
Colin Hay, "Structure and Agency" M&S, chp 10 (optional)

**Measurement and Data**

19 Sep – Assignment 1 Due [a page from Wkt2 –TBA] 
In class, the rest of Wkt2.
Roy Chp 3 Types of Data [REQ]

**Hypotheses and Variables**

21 Sep – In class, Wkt3. Variables.
Roy Chp 4 Variables, Variation and Explanation [REQ]

26 Sep – In class, Wkt4. Hypothesis testing.
Roy Chp 5 Hypotheses [REQ]

**Surveys, Sampling and sampling distributions**
28 Sep - Assignment 2 Due [a page from Wkt5 –TBA] 
In class, the rest of Wkt5.
Roy Chp 6 Sampling [REQ] and 7 Data Entry [optional]

**Some Basic Univariate descriptive statistics**
Measures of central tendency, variation
3 Oct - In class, Wkt6.
Roy Chp 8 Descriptive Stats [REQ]
[Central Limit Theorum and significance]

5 Oct - In class, Wkt8
How to use SPSS. [possible lab day]
More on confidence intervals.

10 Oct - Assignment 3 Due – print out from SPSS.
Roy Chp 9 Crosstabs [REQ]

**Simple measures of bivariate association**
Hypothesis test, significance test, t-test and chi-square.

12 Oct - In class, Wkt10.
Roy Chp 10 Tests of statistical significance [REQ]
Also required – "Jordan & Sanchez" - article link on Brightspace
17 Oct - Assignment 4 Due [a page from Wkt10 –TBA]
    In class, the rest of Wkt10.
    Review to this point

19 Oct – Quiz

**Control variables and spurious relationships**
24 Oct - Roy Chp 11 Controls with Crosstabs [REQ]
    Also required – "Gamson & Modig" - article link on Brightspace

**Correlations among metric variables**
    Pearson correlation, scatter plots and regression.
26 Oct - Assignment 5 Due – print out from SPSS of own crosstab.
    In class, Wkt11.
    Roy Chp 12 – read first half – simple regression [REQ]

31 Oct - More on regression [catch-up day]

Nov 2 - Multiple regression
    By this date all students should have submitted a brief statement on their planned research
    paper (for approval by the instructor), including hypothesis to be tested, data set, and basic
    method.
    Roy Chp 12 – read rest of chapter [REQ]

Nov 7 - Assignment 6 Due [a page from Wkt12 –TBA]
    More on multiple regression – Beta Weights

Nov 9 - In class, the rest of Wkt12. [possible lab day]

Dal Reading Week [ 14 & 16 Nov]

**More advanced topics**

Nov 21 - ANOVA

Nov 23 – Research paper to be uploaded in Brightspace by this date.

Nov 28 – a brief introduction to logistic regression, factor analysis, and scaling and cluster analysis

Nov 30 – review for the final

Final exam period – 6 thru 16 Dec.
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.

University Statements

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 (The Center for Academic Integrity, Duke University, 1999). 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. Click here to read more.

Accessibility
The Advising and Access Services Centre is Dalhousie's centre of expertise for student accessibility and accommodation. The advising team works with students 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, NFLD). Click here to read more.

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. Click here to read more.

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. We stand for equality. Dalhousie is strengthened in our diversity. We are a respectful and inclusive community. We are committed to being a place where everyone feels welcome and supported, which is why our Strategic Direction prioritizes fostering a culture of diversity and inclusiveness (Strategic Priority 5.2). Click here to read more.

Recognition of Mi’kmaq Territory
Dalhousie University would like to acknowledge that the University is on Traditional Mi’kmaq Territory. The Elders in Residence program provides students with access to First Nations elders for guidance, counsel and support. Visit the office in the McCain Building (room 3037) or contact the programs at elders@dal.ca or 902-494-6803 (leave a message).

University Policies and Programs
• Important Dates in the Academic Year (including add/drop dates) http://www.dal.ca/academics/important_dates.html
• University Grading Practices: Statement of Principles and Procedures
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 - Academic Advising:
  https://www.dal.ca/campus_life/academic-support/advising.html
- Copyright and Fair Dealing: https://libraries.dal.ca/services/copyright-office/fair-dealing/fair-dealing-guidelines.html
- Libraries: http://libraries.dal.ca
- Student Health and Wellness (includes Counselling and Psychological Services):
- Black Student Advising: https://www.dal.ca/campus_life/communities/black-student-advising.html
- Indigenous Student Centre: https://www.dal.ca/campus_life/communities/indigenous.html
- ELearning Website: https://www.dal.ca/dept/elearning.html
- Student Advocacy Services: http://dsu.ca/dsas
- Writing Centre: https://www.dal.ca/campus_life/academic-support/writing-and-study-skills.html
- Studying for Success program and tutoring: https://www.dal.ca/campus_life/academic-support/study-skills-and-tutoring.html