

**PSCI 2702B**  
**QUANTITATIVE RESEARCH METHODS IN POLITICAL SCIENCE**

Tuesday, 6:05 p.m. – 7:55 p.m.  
Tory Building 360

Instructor: Owen Temby  
Office: D691 Loeb Building  
Office Hours: Tuesdays 3:30 p.m. to 5:30 p.m.  
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**COURSE OBJECTIVES**

The objectives of this course are twofold. First, the course aims to give students an appreciation of the role of statistics in empirical political science research. Second, the course aims to teach students to understand and use some basic statistical methods, both in their own research and in critically reading the research of others in the field.

Some of the techniques to be addressed include:

- a. Descriptive statistics, which are used to help summarize, organize and describe data;
- b. Inferential statistics, which allow us to make generalizations about larger populations by using information from a subset sample (e.g., such as in public opinion polling);
- c. Measures of association, that tell us about relationships between two or more variables or phenomena (e.g., does age influence a person's likelihood of voting or does gender influence a person's political party choice?).

We will examine and apply these techniques in lectures, readings and labs. Lectures will draw upon the assigned readings and introduce examples of research from the field; labs will introduce students to SPSS – a statistical analysis program – in manipulating Canadian federal elections data.

By the end of the course, students should be able to:

- To describe and apply principles of research design and methodology, including systematic data gathering and analysis;
- To become familiar with and apply a number of statistical techniques for the analysis of social and political data;
- To competently interpret and critically analyze basic statistical information and language as it is used in the study of political science.

Please note that this is *not* a math course – you do not require any advanced mathematics training to do well. You *do* need to be able to think systematically through problems and concepts. In order to do well in this course, it is necessary (but not sufficient) to attend classes and tutorials regularly, and keep up with readings. The material is cumulative and will be presented in a logical sequence. Missing classes or labs may result in difficulty with subsequent material.

**COURSE FORMAT**

The course will have one two-hour lecture per week, and nine one-hour labs. See attached schedule for dates and topics.

Computer labs will give students an opportunity to apply course material covered in the preceding week's lectures and readings, and to familiarize themselves with SPSS in order to complete assignments. Lab sessions will be held in the computer labs assigned to each section. Changing your lab section requires the permission of your TA *and* the TA whose lab you wish to attend.

### **STUDENT CONDUCT, ACADEMIC REGULATIONS, AND ACADEMIC ACCOMODATIONS**

Students are expected to be familiar with and abide by academic and conduct regulations of Carleton University. Undergraduate students should consult the *Academic Regulations* listed in the Undergraduate Calendar, in particular those dealing with Instructional Offenses and Offenses of Conduct (sections 14 and 15).

**For Students with Disabilities:** Students with disabilities requiring academic accommodations in this course are encouraged to contact the Paul Menton Centre (PMC) for Students with Disabilities (500 University Centre) to complete the necessary forms. After registering with the PMC, make an appointment to meet with the instructor in order to discuss your needs **at least two weeks before the first in-class test or CUTV midterm exam**. This will allow for sufficient time to process your request. Please note the following deadline for submitting completed forms to the PMC for formally scheduled exam accommodations: **March 14<sup>th</sup>, 2008** for April examinations.

**For Religious Observance:** Students requesting accommodation for religious observances should apply in writing to their instructor for alternate dates and/or means of satisfying academic requirements. Such requests should be made during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist, but no later than two weeks before the compulsory academic event. Accommodation is to be worked out directly and on an individual basis between the student and the instructor(s) involved. Instructors will make accommodations in a way that avoids academic disadvantage to the student. Instructors and students may contact an Equity Services Advisor for assistance ([www.carleton.ca/equity](http://www.carleton.ca/equity)).

**For Pregnancy:** Pregnant students requiring academic accommodations are encouraged to contact an Equity Advisor in Equity Services to complete a *letter of accommodation*. Then, make an appointment to discuss your needs with the instructor at least two weeks prior to the first academic event in which it is anticipated the accommodation will be required.

**Plagiarism:** The Undergraduate Calendar defines plagiarism as: "to use and pass off as one's own idea or product, work of another without expressly giving credit to another." The Graduate Calendar states that plagiarism has occurred when a student either: (a) directly copies another's work without acknowledgment; or (b) closely paraphrases the equivalent of a short paragraph or more without acknowledgment; or (c) borrows, without acknowledgment, any ideas in a clear and recognizable form in such a way as to present them as the student's own thought, where such ideas, if they were the student's own would contribute to the merit of his or her own work. Instructors who suspect plagiarism are required to submit the paper and supporting documentation to the Departmental Chair who will refer the case to the Dean. It is not permitted to hand in the same assignment to two or more courses. The Department's Style Guide is available at: <http://www.carleton.ca/polisci/undergrad/Essay%20Style%20Guide.html>

**Oral Examination:** At the discretion of the instructor, students may be required to pass a brief oral examination on research papers and essays.

**Submission and Return of Term Work:** Papers must be handed directly to the instructor and will not be date-stamped in the departmental office. Late assignments may be submitted to the drop box in the corridor outside B640 Loeb. Assignments will be retrieved every business day at **4 p.m.**, stamped with

that day's date, and then distributed to the instructor. For essays not returned in class please attach a **stamped, self-addressed envelope** if you wish to have your assignment returned by mail. Please note that assignments sent via fax or email will not be accepted. Final exams are intended solely for the purpose of evaluation and will not be returned.

**Approval of final grades:** Standing in a course is determined by the course instructor subject to the approval of the Faculty Dean. This means that grades submitted by an instructor may be subject to revision. No grades are final until they have been approved by the Dean.

**Course Requirements:** Students must fulfill all course requirements in order to achieve a passing grade. Failure to hand in any assignment will result in a grade of F. Failure to write the final exam will result in a grade of ABS. FND (Failure No Deferred) is assigned when a student's performance is so poor during the term that they cannot pass the course even with 100% on the final examination. In such cases, instructors may use this notation on the Final Grade Report to indicate that a student has already failed the course due to inadequate term work and should not be permitted access to a deferral of the examination. Deferred final exams are available ONLY if the student is in good standing in the course.

**Connect Email Accounts:** The Department of Political Science strongly encourages students to sign up for a campus email account. Important course and University information will be distributed via the Connect email system. See <http://connect.carleton.ca> for instructions on how to set up your account.

## ACADEMIC RESOURCES

If A Student Needs Assistance With...	Refer To...	Contact Information
<ul style="list-style-type: none"> <li>• understanding academic rules and regulations</li> <li>• choosing or changing their major</li> <li>• finding a tutor</li> <li>• academic planning guided by an Academic Advisor</li> <li>• polishing study skills</li> </ul>	<b>Student Academic Success Centre (SASC)</b>	302 Tory Building 520-7850 <a href="http://www.carleton.ca/sasc">www.carleton.ca/sasc</a>
<ul style="list-style-type: none"> <li>• a learning disability</li> </ul>	<b>Paul Menton Centre</b>	500 University Centre 520-6608; <a href="http://www.carleton.ca/pmc">www.carleton.ca/pmc</a>
<ul style="list-style-type: none"> <li>• developing writing skills</li> </ul>	<b>Writing Tutorial Service</b>	229 Paterson Hall 520-6632; <a href="http://www.carleton.ca/wts">www.carleton.ca/wts</a>
<ul style="list-style-type: none"> <li>• assistance with math</li> </ul>	<b>Math Tutorial</b>	<a href="http://www.math.carleton.ca/student">www.math.carleton.ca/student</a>
<ul style="list-style-type: none"> <li>• polishing English conversation skills, or proof reading (International students only)</li> </ul>	<b>International Student Advisory</b>	501 University Centre 520-6600; <a href="http://www.carleton.ca/isa">www.carleton.ca/isa</a>
<ul style="list-style-type: none"> <li>• research assistance</li> </ul>	Staff at <b>MacOdrum Library</b> reference desk	520-2735 <a href="http://www.library.carleton.ca">www.library.carleton.ca</a>
<ul style="list-style-type: none"> <li>• statistics/SPSS assistance (by appointment only)</li> </ul>	<b>Data Centre, MacOdrum Library</b>	Statistical Consultant 520-2600 x 2619

## PASS PROGRAM

This year, the Student Academic Success Centre will be running Peer Assisted Study Sessions (PASS) for this course. PASS is a series of weekly study sessions for students taking PSCI 2702A and 2702B. PASS is provided for all students who want to improve their understanding of course material and improve their grades. Attendance is free, voluntary and anonymous, and sessions are facilitated by former students of 2702. More information about these sessions will be made available in class, and can also be obtained at the PASS website or by email at: [pass@carleton.ca](mailto:pass@carleton.ca)

## COURSE TEXTS

The following required textbooks and software are available as a bundle through Haven Books located at 43 Seneca Street (at Sunnyside), Ottawa.

- Joseph F. Healey (2007). *The Essentials of Statistics: A Tool for Social Research*. Toronto: Thomson OR any late edition of Joseph F. Healey, *Statistics: A Tool for Social Research*.
- Lee A. Kirkpatrick and Brooke Feeney (2007). *A Simple Guide to SPSS for Windows*. Toronto: Thomson (bundled with SPSS Student Version 14.0 software)
  - Note: there will be a limited number of this text separate from the Healey text also available for students who already have a copy of Healey.

## EVALUATION.

Assessments and evaluation of student learning will be done using written assignments and two exams that require students to apply the concepts and statistical techniques taught in the course. The following table provides a breakdown of the weighting and due dates of assignments and the exam:

<b>Item:</b>	<b>Due Dates:</b>	<b>Marks:</b>
Labs (9 @ 5% each)	See schedule below	45%
Midterm Exam	February 12	10%
Essay Assignment	April 1	20%
Final Exam	Final Exam Period	25%
Total:		100%

All labs, assignments and the final exam are mandatory for students to receive credit for the course. Lab work is based on SPSS exercises and interpretation of data generated through the data analysis program. Lab work is due one week after the lab in which it is discussed. Essay Assignments will take the form of short essays (8-10 pages) which require students incorporate statistical analysis to address specific issues and/or questions. Detailed instructions and grading guidelines for assignments will be distributed via WebCT. Every effort will be made to grade and return labs within 1 week and assignments within 2 weeks of their due dates. Grades will be posted on WebCT and assignments can be picked up during TA office hours. The final exam will be cumulative and include multiple choice, short answer and essay questions.

**Policy on Late Assignments:** Assignments are due in regularly scheduled classes. Assignments received after the end of class on the due date will be considered late. Assignments placed in the department's Drop Box on the due date will also be considered late. If you need to use the drop box, you must submit your assignment at least one day *before* the due date in order to avoid the late penalty. Late penalties shall be assessed on a daily basis, including weekends. Extensions will not be granted except on medical

grounds, with appropriate documentation. Please note, computer problems or lost data are not valid grounds for extensions. Lab work is due in your regularly scheduled lab. While working in the lab, be sure to regularly and frequently save your data.

Weekly assignments will not be not be accepted late, and are to be handed in during the student's tutorial

The essay may be handed in late, but a penalty of two percent per day will be applied.

The only exception is in the case of extenuating circumstances, such as religious observance, personal illness or a death in the family. In these cases, an extension will be granted if the student offers documentation of the extenuating circumstances to the instructor, such as a doctor's note, a death certificate, or explanation of the religious observance.

**Policy on Collaborative Work:** Given the nature of assignments in this course (where all students work with the same data sets, and answer the same sets of questions), there may be ample opportunity to copy the work of fellow students. Discussing assignments with your colleagues is encouraged, but students are not permitted to submit the same work for evaluation. Therefore, those who copy and those who share their work will both be considered guilty of academic dishonesty. ***Any written assignments deemed by the Instructor to be too similar will be given a grade of 0.*** Therefore, to prevent the possibility of getting a zero, please:

- **DO NOT** collaborate with other students when writing your assignments;
- **DO NOT** share your written work with anyone else;
- **DO NOT** ask someone else to print your assignment;
- **DO NOT** ask someone else to hand in your assignment.

If you have any questions regarding collaboration or plagiarism in relation to assignments and exams please see the Instructor.

### Lecture Topics and Schedule

The course is organized to enable flexibility in covering the course material. The proposed schedule is to serve as a tentative guide only. Some changes may be made at the discretion of the instructor.

<b>Week</b>	<b>Topics and Readings</b>	<b>Lab and Assignment</b>
Jan 8	Introduction <ul style="list-style-type: none"> <li>• Healey, Chapter 1</li> </ul>	none
Jan 15	Descriptive Statistics I: Basic Descriptive Statistics and Measures of Central Tendency <ul style="list-style-type: none"> <li>• Healey, Chapters 2 and 3</li> </ul>	Lab #1
Jan 22	Descriptive Statistics II: Measures of Dispersion <ul style="list-style-type: none"> <li>• Healey, Chapter 4</li> </ul>	Lab #2 Assignment #1 due
Jan 29	Probability and the Normal Curve <ul style="list-style-type: none"> <li>• Healey, Chapter 5</li> </ul>	Lab #3 Assignment #2 due
Feb 5	Inferential Statistics I: Sampling Distribution, Estimation <ul style="list-style-type: none"> <li>• Healey, Chapter 6</li> </ul>	Lab #4 Assignment #3 due
Feb 12	Inferential Statistics II: One Sample Hypothesis Testing <ul style="list-style-type: none"> <li>• Healey, Chapter 7</li> </ul>	Lab #5 Assignment #4 due
Feb 19	Winter break – no class	
Feb 26	Inferential Statistics III: Two Sample Hypothesis Testing <ul style="list-style-type: none"> <li>• Healey, Chapter 8</li> </ul>	Lab #6 Assignment #5 due
Mar 4	Inferential Statistics IV: Analysis of Variance <ul style="list-style-type: none"> <li>• Healey, Chapter 9</li> </ul>	Lab #7 Assignment #6 due
Mar 11	Inferential Statistics V: The Chi-square <ul style="list-style-type: none"> <li>• Healey, Chapter 10</li> </ul>	Lab #8 Assignment #7 due
Mar 18	Measures of Association I: Nominal Data <ul style="list-style-type: none"> <li>• Healey, Chapter 11</li> </ul>	Lab #9 Assignment #8 due
Mar 25	Measures of Association II: Ordinal Data <ul style="list-style-type: none"> <li>• Healey, Chapter 12</li> </ul>	no lab--TA consultation on essay Assignment #9 due in TA's office
Apr 1	Measures of Association III: Interval-Ratio Data <ul style="list-style-type: none"> <li>• Healey, Chapter 13</li> </ul>	no lab essay assignment due in TA's office

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