

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

Wednesdays and Fridays, 9:35-10:25

*Check room on Carleton Central*

**Instructor:**

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**Office Hours:**

Wednesdays  
11:00 a.m. to 1:00 p.m.

**COURSE DESCRIPTION**

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 summarise, organise and describe data;
- b. Inferential statistics, which allow us to make generalisations 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 analyse 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 two 1-hour lectures per week, and a total of 7 one-hour computer labs (see schedule attached 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.

## EVALUATION

Assessments and evaluation of student learning will be done using written assignments and a final exam 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:

Item:	Due Dates:	Marks:
Labs (6 @ 7% each)	TBA	42%
On-line Quizzes (3 @ 6%)	Week of Jan 26, Feb 23, Mar 18	18%
Essay Assignment	April 1	15%
Final Exam	Final Exam Period	25%
Total:		100%

All labs, quizzes, 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. Students must submit 6 of 7 lab assignments for grading purposes. Lab work is due one week after the lab in which it is discussed. On-line quizzes are to be completed through WebCT and will be accessible over a 5 day period. The essay assignment will take the form of a short paper (12-15 pages) which requires 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 the essay assignment within 2 weeks of their due dates. **Early feedback** on student progress will be provided by February 27<sup>th</sup> and will include grades for three lab assignments and the first quiz. All 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:** All 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. Specific late penalties will be made explicit for each assignment distributed, and may vary across assignments. Please refer to the specific assignment or lab for more information.

**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.

## COURSE TEXTS

The following required textbook is available 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.
  - Note: this text can also be purchased as a bundle with SPSS Student Version software.
- Additional *required* readings may be assigned from time to time; these readings (or links to the readings) will be made available electronically through the course WebCT site.

## PASS PROGRAM

The Student Academic Success Centre will run 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)

## 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>

If A Student Needs Assistance With...	Refer To...	Contact Information
• a learning disability	<b>Paul Menton Centre</b>	500 University Centre 520-6608; <a href="http://www.carleton.ca/pmc">www.carleton.ca/pmc</a>
• developing writing skills	<b>Writing Tutorial Service</b>	229 Paterson Hall 520-6632; <a href="http://www.carleton.ca/wts">www.carleton.ca/wts</a>
• assistance with math	<b>Math Tutorial</b>	<a href="http://www.math.carleton.ca/student">www.math.carleton.ca/student</a>
• polishing English conversation skills, or proof reading (International students only)	<b>International Student Advisory</b>	501 University Centre 520-6600; <a href="http://www.carleton.ca/isa">www.carleton.ca/isa</a>
• research assistance	Staff at <b>MacOdrum Library</b> reference desk	520-2735 <a href="http://www.library.carleton.ca">www.library.carleton.ca</a>
• statistics/SPSS assistance (by appointment only)	<b>Data Centre, MacOdrum Library</b>	Statistical Consultant 520-2600 x 2619

## STUDENT CONDUCT, ACADEMIC REGULATIONS AND ACADEMIC ACCOMMODATIONS

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 must register with the Paul Menton Centre for Students with Disabilities (500 University Centre) for a formal evaluation of disability-related needs. Registered PMC students are required to contact the centre (613-520-6608) every term to ensure that the instructor receives your letter of accommodation. 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 assignment is due or the first in-class test/midterm requiring accommodations**. If you require accommodation for your formally scheduled exam(s) in this course, please submit your request for accommodation to PMC by **November 7, 2008 for December examinations**, and **March 6, 2009 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 University Senate defines plagiarism as “presenting, whether intentional or not, the ideas, expression of ideas or work of others as one’s own.” This can include:

- reproducing or paraphrasing portions of someone else’s published or unpublished material, regardless of the source, and presenting these as one’s own without proper citation or reference to the original source;
- submitting a take-home examination, essay, laboratory report or other assignment written, in whole or in part, by someone else;
- using ideas or direct, verbatim quotations, or paraphrased material, concepts, or ideas without appropriate acknowledgment in any academic assignment;
- using another’s data or research findings;
- failing to acknowledge sources through the use of proper citations when using another’s works and/or failing to use quotation marks;
- handing in "substantially the same piece of work for academic credit more than once without prior written permission of the course instructor in which the submission occurs.

Plagiarism is a serious offence which cannot be resolved directly with the course’s instructor. The Associate Deans of the Faculty conduct a rigorous investigation, including an interview with the student, when an instructor suspects a piece of work has been plagiarized. Penalties are not trivial. They include a mark of zero for the plagiarized work or a final grade of "F" for the course. 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 fulfil 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:** All email communication to students from the Department of Political Science will be done via Connect. Important course and University information is also distributed via the Connect email system. It is the student’s responsibility to monitor their Connect account.

**Official Course Outline:** The course outline posted to the Political Science website is the official version.

## 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.

Week	Topic and Readings	Lab Topics
Jan 7	Introduction ♦ Healey, Chapter 1	No Labs
Jan 14	Descriptive Statistics I: Introduction and Measures of Central Tendency ♦ Healey, Chapters 2 & 3	Lab #1: Tables and Graphs
Jan 21	Descriptive Statistics II: Measures of Dispersion ♦ Healey, Chapter 4	Lab #2: Frequency Distributions and Descriptive Statistics
Jan 28	Probability and the Normal Curve ♦ Healey, Chapter 5	Free lab – consultations with TA on course material and assignments <b>ON-LINE QUIZ #1 (Jan 26-30)</b>
Feb 4	Inferential Statistics I: Sampling Distribution, Estimation ♦ Healey, Chapter 6	Free lab – consultations with TA on course material and assignments
Feb 9	Inferential Statistics II: One Sample Hypothesis Testing ♦ Healey, Chapter 7	Lab #3: One Sample t-test
Feb 16	Winter Break	
Feb 23	Inferential Statistics III: Two Sample Hypothesis Testing ♦ Healey, Chapter 8	Lab #4: Two Sample t-test <b>ON-LINE QUIZ #2 (Feb 23-27)</b>
Mar 4	Inferential Statistics IV: Analysis of Variance ♦ Healey, Chapter 9	Lab #5: ANOVA
Mar 11	Inferential Statistics IV: The Chi-Square ♦ Healey, Chapter 10	Lab #6: Chi-Square Test
Mar 18	Measures of Association I: Nominal Data ♦ Healey, Chapter 11	Free lab – consultations with TA on course material and assignments <b>ON-LINE QUIZ #3 (Mar 18-24)</b>
Mar 25	Measures of Association II: Ordinal Data ♦ Healey, Chapter 12	Lab #7: Measures of Association
Apr 1	Measures of Association III: Interval Data – Regression ♦ Healey, Chapter 13 <b>ESSAY ASSIGNMENT DUE</b>	No Labs
Apr 3	Review Class	No Labs

## **CARLETON POLITICAL SCIENCE SOCIETY**

**Carleton Political Science Society:** The Carleton Political Science Society (CPSS) has made its mission to provide a social environment for politically inclined students and faculty. Holding social events, debates, and panel discussions, CPSS aims to involve all political science students in the after-hours academic life at Carleton University. Our mandate is to arrange social and academic activities in order to instill a sense of belonging within the Department and the larger University community. Members can benefit through numerous opportunities which will complement both academic and social life at Carleton University. To find out more, please email [carletonpss@gmail.com](mailto:carletonpss@gmail.com), visit our website at [poliscisociety.com](http://poliscisociety.com), or come to our office in Loeb D688.

**Last revised: December 3, 2008**