

## **QUANTITATIVE RESEARCH METHODS IN POLITICAL SCIENCE**

Tuesday 11:35- 14:25

Thursday 11:35-14:25

Please confirm location at Carleton Central

**Instructor:** Andrea Wagner

**Office:** B 647 Loeb Building

**Office Hours:** Tuesday from 14:25 to 16:25

Or by appointment

**Phone:** 613-520-2600 ext. 4129

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### **Course Objectives**

This course, proposed for second year undergraduate students, offers an introduction to applied statistics using one of the most important statistical packages for the social sciences (SPSS). The main objectives of the course are: (1) to help students gain a thorough understanding of applied statistics; (2) to provide a toolkit that allows students to conduct their own research (3) to train students to explore and handle data in a systematic manner; and (4) to analyze these results with the help of SPSS.

Lectures and Labs will address the following statistical techniques:

- ✓ Descriptive Statistics
- ✓ Inferential Statistics
- ✓ Measures of Association
- ✓ Regression Analysis

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

- ✓ Describe and apply principles of research design and methodology, including systematic data gathering;
- ✓ To apply all the statistical techniques discussed in class for the analysis of quantitative data
- ✓ To interpret, discuss and present statistical information
- ✓ To understand and master many parts of the SPSS statistical software
- ✓ To carry out their own research and apply the necessary quantitative methods to address the given research question

**Course Format**

PSCI 2702A will consist of a three hour lecture where the students will be introduced to SPSS. It is very important that students attend every lecture in order to fulfill the requirements of the course. However, this is not a math course- you do not require any advanced mathematics training to do well. All math /statistics related concepts and formulas will be explained carefully by the instructor. As a result of the intensity of the course and the extensive material we will cover, students are also strongly encouraged to keep up with the readings and complete all the SPSS assignments in advance. In addition to this, the course is designed to be interactive and the instructor strongly encourages active student participation.

**Academic Resources**

<b>If A Student Needs Assistance With</b>	<b>Refer To...</b>	<b>Contact Information</b>
<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 student 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>	Data Centre, MacOdrum Library	Statistical Consultant 520-2600x 2619

### Course Text

- Andrea Wagner (2013) *Quantitative Research Methods in Political Science*, First Canadian Edition, Kendall Hunt
- Joseph F Healey and Steven G. Prus (2010) *Statistics, A Tool for Social Research*, Second Canadian Edition. Toronto: Nelson Education

### Evaluation

Assessment and evaluation of student learning will be done using five written assignments (four Labs and one Essay) and one final written exam that requires students to apply the concepts and statistical techniques taught in the course. The following table provides a breakdown of the weighting and important dates.

Item	Due Dates	Percent
<b>Labs ( 4 @ 7% each)</b>	<b>Lab 1- July 19<sup>th</sup></b> <b>Lab 2- July 26<sup>th</sup></b> <b>Lab 3- August 4<sup>th</sup></b> <b>Lab 4- August 11<sup>th</sup></b>	<b>28%</b>
<b>Essay</b>	<b>August 11<sup>th</sup></b>	<b>32%</b>
<b>Final Exam</b>	<b>Final Exam Period</b>	<b>40%</b>

The essay, the labs and the final exam are mandatory for students to receive credit for the course. If the student does not submit all labs and/or the Final Essay and/or fails to write the final exam he/she will fail the course. Lab work is based on SPSS exercises and interpretation of data generated through the data analysis program. The essay assignment will take the form of a 15 to 20 page essay which requires students to incorporate statistical analysis to address adequately an individually chosen research question. Detailed instructions and grading guidelines for assignments will be distributed via CuLearn. Every effort will be made to grade and return labs within 1 week and the essay within 2 weeks of their due dates. Grades will be posted on CuLearn and labs will be returned during lectures. The final exam will be cumulative and will include multiple choice, short answer and essay questions.

### Policy on Late Lab/Essay Assignments

Labs/Essay assignments are due at the beginning of 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.

### Policy on Collaborative Work

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 (similar mistakes, same approach etc) will be given a grade of zero. Therefore, to prevent this, 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.

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<b>WEEK</b>	<b>TOPIC</b>
<b>July 5</b>	<b>Introduction</b> <b>Descriptive Statistics</b> <ul style="list-style-type: none"><li>▪ Measures of Central Tendency</li><li>▪ Measures of Dispersion</li></ul>
<b>July 7</b>	<b>Descriptive Statistics cnt.</b> <ul style="list-style-type: none"><li>▪ The Normal Curve</li></ul>
<b>July 12</b>	<b>Inferential Statistics</b> <b>Hypothesis Testing I</b>

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	<ul style="list-style-type: none"><li>▪ The One-Sample Case</li></ul>
<b>July 14</b>	<b>Hypothesis Testing II</b> <ul style="list-style-type: none"><li>▪ The Two-Sample Case</li></ul>
<b>July 19</b>	<b>Hypothesis Testing III</b> <ul style="list-style-type: none"><li>▪ The Analysis of Variance (ANOVA)</li></ul>
<b>July 21</b>	<b>Hypothesis Testing IV</b> <ul style="list-style-type: none"><li>▪ Chi Square</li></ul>
<b>July 26</b>	<b>Bivariate Measures of Association</b> <ul style="list-style-type: none"><li>▪ Introduction</li><li>▪ Variables measured at the nominal and ordinal level</li></ul>
<b>July 28</b>	<b>Regression Analysis</b> <ul style="list-style-type: none"><li>▪ Simple Regression</li></ul>
<b>August 2</b>	<b>Regression Analysis</b> <ul style="list-style-type: none"><li>▪ Multiple Regression</li></ul>
<b>August 4</b>	<b>Regression Analysis cnt.</b>
<b>August 9</b>	<b>Revision for the Final Exam I</b>
<b>August 11</b>	<b>Revision for the Final Exam II</b>

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### **Academic Accommodations**

**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 request for 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 **(Dates to be determined still for summer term)**

**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.

**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:** 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 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.

**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.

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