Course Description

This is the introductory course in quantitative methods for undergraduate students in social science. It is assumed that students are not familiar with statistical software. During the course, students will be introduced to descriptive and inferential statistics to allow students to conduct their own research using quantitative methods. More importantly, students will learn how to interpret the results of the statistical tests and to understand their meaning.

The course is based on the use of Statistical Package for the Social Sciences (SPSS), which is especially designed for data analysis in social sciences. No previous experience using this or related software is expected from students.

By the end of the course students should be able to understand and conduct basic tests using SPSS such as correlation, one sample t-test, independent t-test, ANOVA and multiple regressions. Students should acquire a strong understanding of how to create their own research design applying quantitative methods, and to be able to conduct research, organize and summarize results.


Course Grade Breakdown

Assignments: 5 labs (8% each) – 40%
Final essay: 30%
Final Exam: 30%

Assignments (Labs): Detailed instructions for each assignment will be discussed during the class. Assignments will be based on the course material including measure of central tendency, measure of dispersion, one-sample t-test, Chi-square test, ANOVA and regressions. All assignments should be submitted online in CuLearn on their due date (before 11pm).
Late assignments will be penalized 1% per day of the course total including the weekends for the maximum of 7 days. After that, the assignment will be given a mark of 0. Extensions will not be granted except on medical reasons with appropriate documentation from a physician.

**Final essay:** by the end of the course, students will have to write a research essay (12-15 pages) based on the material learned during the course. Students will have to conduct statistical tests studied during the course, using the SPSS program. They will have to demonstrate their ability to interpret and analyze data in such a way as to make their own conclusions about studied political phenomena. All final essay should be submitted online in CuLearn on their due date (before 11pm).

**Final exam:** The exam will be held during the exam period. Detailed instructions will be provided during the lecture closer to the exam’s date.

**Topics**

**Lecture 1** Introduction to Quantitative Analysis (January 11)  
Ch. 1

**Lecture 2** Variables and Level of Measurement (January 18)  
Ch. 2, 4, 5

**Lecture 3** Descriptive statistics; Frequency (January 25)  
lab N1 due date  
Ch. 7,10,11

**Lecture 4** Measure of Dispersion; The Normal Curve (February 01)  
Ch. 6, 7, 8

**Lecture 5** Bivariate analysis. Correlations (February 08)  
lab N 2 due date  
Ch. 9,13,14,16

**Lecture 6** Chi-Square test (February 15)  
Ch. 10,13,20

**Lecture 7** Sample and Population, One sample T-test (March 01)  
lab N 3due date  
Ch. 18, 20, 21

**Lecture 8** Sample and Population, Independent T-test (March 08)  
Ch. 18, 21

**Lecture 9** ANOVA Test, Simple Regressions (March 15)  
lab N 4 due date  
Ch. 14, 17

**Lecture 10** Multiple Regressions (March 22)
Ch. 14, 17

Lecture 11 Multiple Regressions continued (March 29) **lab N5 due date**
Ch. 14, 17

Lecture 12 Preexam review (April 05) **final essay due date**

### Academic and Student Support Resources

<table>
<thead>
<tr>
<th>IF A STUDENT NEEDS ASSISTANCE WITH...</th>
<th>REFER TO...</th>
<th>CONTACT INFORMATION</th>
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</thead>
<tbody>
<tr>
<td>understanding academic rules and regulations</td>
<td>Student Academic Success Centre (SASC)</td>
<td>302 Tory Building 613-520-7850 <a href="http://www2.carleton.ca/sasc/">http://www2.carleton.ca/sasc/</a></td>
</tr>
<tr>
<td>choosing or changing their major</td>
<td></td>
<td>No appointment necessary as all students are seen on a walk-in basis.</td>
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<td>finding a tutor</td>
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<td>academic planning guided by an Academic Advisor</td>
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<tr>
<td>polishing study skills</td>
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<tr>
<td>...developing writing skills</td>
<td>Writing Tutorial Service</td>
<td>4th Floor, Library 613-520-6632 <a href="https://carleton.ca/csas/writingservices/">https://carleton.ca/csas/writingservices/</a></td>
</tr>
<tr>
<td>...peer assisted tutoring for pre-identified, notoriously difficult courses</td>
<td>Peer Assisted Study Sessions</td>
<td>Centre for Student Academic Support <a href="https://carleton.ca/csas/group-support/">https://carleton.ca/csas/group-support/</a></td>
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<tr>
<td>...Library and Research help; Learning Support and IT support</td>
<td>Staff at MacOdrum Library (reference services desk)</td>
<td><a href="http://www.library.carleton.ca/">http://www.library.carleton.ca/</a> 613-520-2735</td>
</tr>
<tr>
<td>...coping with stress or crisis</td>
<td>Office of Student Affairs or Health and Counseling Services</td>
<td>Either ext. 2573 or <a href="http://www.carleton.ca/student-affairs">http://www.carleton.ca/student-affairs</a> or <a href="http://www.carleton.ca/health">www.carleton.ca/health</a></td>
</tr>
</tbody>
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### Academic Accommodations

The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or pmc@carleton.ca for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your **Letter of Accommodation** at the beginning of the term, and no later than two weeks
before the first in-class scheduled test or exam requiring accommodation (*if applicable*). After requesting accommodation from PMC, meet with me to ensure accommodation arrangements are made. Please consult the PMC website for the deadline to request accommodations for the formally-scheduled exam (*if applicable*).

**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).

**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 may include a mark of zero for the plagiarized work or a final grade of "F" for the course.

Student or professor materials created for this course (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the author(s). They are intended for personal use and may not be reproduced or redistributed without prior written consent of the author(s).

Submissions and Return of Term Work: Papers must be submitted directly to the instructor according to the instructions in the course outline 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. Final exams are intended solely for the purpose of evaluation and will not be returned.

Grading: Standing in a course is determined by the course instructor, subject to the approval of the faculty Dean. Final standing in courses will be shown by alphabetical grades. The system of grades used, with corresponding grade points is:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Letter grade</th>
<th>12-point scale</th>
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</thead>
<tbody>
<tr>
<td>90-100</td>
<td>A+</td>
<td>12</td>
</tr>
<tr>
<td>85-89</td>
<td>A</td>
<td>11</td>
</tr>
<tr>
<td>80-84</td>
<td>A-</td>
<td>10</td>
</tr>
<tr>
<td>77-79</td>
<td>B+</td>
<td>9</td>
</tr>
<tr>
<td>73-76</td>
<td>B</td>
<td>8</td>
</tr>
<tr>
<td>70-72</td>
<td>B-</td>
<td>7</td>
</tr>
<tr>
<td>67-69</td>
<td>C+</td>
<td>6</td>
</tr>
<tr>
<td>63-66</td>
<td>C</td>
<td>5</td>
</tr>
<tr>
<td>60-62</td>
<td>C-</td>
<td>4</td>
</tr>
<tr>
<td>57-59</td>
<td>D+</td>
<td>3</td>
</tr>
<tr>
<td>53-56</td>
<td>D</td>
<td>2</td>
</tr>
<tr>
<td>50-52</td>
<td>D-</td>
<td>1</td>
</tr>
</tbody>
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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.

Carleton E-mail Accounts: All email communication to students from the Department of Political Science will be via official Carleton university e-mail accounts and/or cuLearn. As important course and University information is distributed this way, it is the student’s responsibility to monitor their Carleton and cuLearn accounts.

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 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, visit https://www.facebook.com/groups/politicalsciencesociety/ 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.