

**POLITICAL SCIENCE 3NN3**  
**Statistical Analysis of Primary Data**  
**Summer 2022**

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**Lecture/Tutorials:** Mondays and  
Wednesdays from 6:30 - 9: 30 pm

**Office Hours:** By appointment (email  
instructor to schedule)

**Class Location:** KTH B121-123  
(computer lab)

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## **Course Description**

In POLSCI 3NN3, students will learn to calculate, analyze, and present quantitative data. This course will introduce you to descriptive statistics, inferential statistics, and measures of association. Using a provided dataset, students will learn to select appropriate variables, clean, code and manipulate data, and then apply statistical analyses to answer research questions such as:

- Who participates in elections?
- What are the most important election issues to Canadians?
- Who is most likely to support social spending?

## **Course Objectives**

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

- Calculate basic descriptive statistics, inferential statistics, and measures of association & know which type of statistical analyses is appropriate to use based on research questions and available data.
- Use SPSS for data analysis.
- Apply quantitative output to critically answer political science questions.

## **Required Materials and Texts**

**Course Textbook:** Noack, Andrea. 2018. *Social Statistics in Action: A Canadian Introduction*. Oxford University Press.

This book is available to buy or rent from McMaster's University Campus Book Store.

## **Class Format**

There will be two components to this course: in-person lectures and in-person tutorials. Each class will contain a traditional lecture style lesson followed by a tutorial that teaches students how to conduct statistical analysis using SPSS software. Both lectures and tutorials will take place in the KTH B121-123 computer lab.

## **Course Evaluation – Overview**

1. Cumulative Tutorial Assignments – 4 x 15%, due July 1, July 8, July 22 and July 29. \*Tutorial assignments are due by 11:59 pm on the due date listed.
2. Final Test – 40%: August 3 at 6:30 pm

## **Course Evaluation – Details**

### **Tutorial Assignments (4 X 15% - 60%)**

Students will be provided a data set to complete four cumulative assignments using SPSS. Each assignment will utilize skills and statistical analyses learned in lecture and tutorial.

- Assignment 1: Due July 1 (11:59 pm)
- Assignment 2: Due July 8 (11:59 pm)
- Assignment 3: Due July 15 (11:59 pm)
- Assignment 4: Due July 29 (11:59 pm)

### **Final Test (40%), due August 3**

The final test will last two hours in length and take place during the last class on August 3. The test format will consist of short-style question. Students will be permitted to use their course notes.

## **Weekly Course Schedule and Required Readings**

### **Class 1 (June 20)**

#### **Course Introduction**

Readings: Course Textbook – Chapter One

### **Class 2 (June 22)**

#### **Descriptive Statistics and Frequency Distributions**

Readings: Course Textbook – Chapter Two

### **Class 3 (June 27)**

#### **Measures of Central Tendency**

Readings: Course Textbook – Chapter Three

### **Class 4 (June 29)**

#### **Measures of Dispersion**

Readings: Course Textbook – Chapter Four

\*Assignment 1 due July 1

### **Class 5 (July 4)**

#### **Population I: Probability, Sampling and Weighting**

Readings: Course Textbook – Chapter Five

**Class 6 (July 6)**

**Population II: Estimates**

Readings: Course Textbook – Chapter Six

\*Assignment 2 due July 8

**Class 7 (July 11)**

**Comparing Group Means**

Readings: Course Textbook – Chapter Seven

**Class 8 (July 13)**

**ANOVA Tests**

Readings: Course Textbook – Chapter Eight

Notes: Assignment Two Due (July 16)

**Class 9 (July 18)**

**Assessing Relationships I**

Readings: Course Textbook – Chapter Nine

**Class 10 (July 20)**

**Assessing Relationships II**

Readings: Course Textbook – Chapter Ten

\*Assignment 3 due July 22

**Class 11 (July 25)**

**Regression I**

Readings: Course Textbook – Chapter Eleven

**Class 12 (July 27)**

**Regression II**

Readings: Course Textbook – Chapter Twelve

\*Assignment 4 due July 29

**Class 13 (No Class August 1 - Civic Holiday)**

**Class 14 (August 3)**

Readings: No assigned Readings

\*Final Test – 6 30 pm in-class

## **Course Policies**

### **Submission of Assignments**

Tests and assignments will be submitted via the course's Avenue to Learn website. Students will be provided a website tour in the first tutorial that will outline where lecture and tutorial content is located, and how to submit assignments and tests.

Students are expected to complete all assignments and tests individually.

### **Grades**

Grades will be based on the McMaster University grading scale:

<b>MARK</b>	<b>GRADE</b>
90-100	A+
85-90	A
80-84	A-
77-79	B+
73-76	B
70-72	B-
67-69	C+
63-66	C
60-62	C-
57-59	D+
53-56	D
50-52	D-
0-49	F

### **Late Assignments**

Late assignments may be subject to a one letter grade per day deduction. For example, an A- assignment received one day late may be reduced to a B+. Late assignments will not be accepted once graded assignments have been returned to the class.

### **Absences, Missed Work, Illness**

McMaster Student Absence Form (MSAF): In the event of an absence for medical or other reasons, students should review and follow the Academic Regulation in the Undergraduate Calendar "Requests for Relief for Missed Academic Term Work".

Students are expected to complete all course evaluation items (tests and assignments). If a student requires accommodation, please contact the instructor as soon as possible to make alternative arrangements.

### **Courses with an On-Line Element**

Some courses may use on-line elements (e.g. e-mail, Avenue to Learn (A2L), LearnLink, web pages, capa, Moodle, ThinkingCap, etc.). Students should be aware that, when they access the electronic components of a course using these elements,

private information such as first and last names, user names for the McMaster e-mail accounts, and program affiliation may become apparent to all other students in the same course. The available information is dependent on the technology used. Continuation in a course that uses on-line elements will be deemed consent to this disclosure. If you have any questions or concerns about such disclosure please discuss this with the course instructor.

### **Online Proctoring**

Some courses may use online proctoring software for tests and exams. This software may require students to turn on their video camera, present identification, monitor and record their computer activities, and/or lock/restrict their browser or other applications/software during tests or exams. This software may be required to be installed before the test/exam begins.

### **Authenticity / Plagiarism Detection**

Some courses may use a web-based service (Turnitin.com) to reveal authenticity and ownership of student submitted work. For courses using such software, students will be expected to submit their work electronically either directly to Turnitin.com or via an online learning platform (e.g. A2L, etc.) using plagiarism detection (a service supported by Turnitin.com) so it can be checked for academic dishonesty.

Students who do not wish their work to be submitted through the plagiarism detection software must inform the Instructor before the assignment is due. No penalty will be assigned to a student who does not submit work to the plagiarism detection software.

**All submitted work is subject to normal verification that standards of academic integrity have been upheld** (e.g., on-line search, other software, etc.). For more details about McMaster's use of Turnitin.com please go to [www.mcmaster.ca/academicintegrity](http://www.mcmaster.ca/academicintegrity).

### **Copyright and Recording**

Students are advised that lectures, demonstrations, performances, and any other course material provided by an instructor include copyright protected works. The Copyright Act and copyright law protect every original literary, dramatic, musical and artistic work, **including lectures** by University instructors.

The recording of lectures, tutorials, or other methods of instruction may occur during a course. Recording may be done by either the instructor for the purpose of authorized distribution, or by a student for the purpose of personal study. Students should be aware that their voice and/or image may be recorded by others during the class. Please speak with the instructor if this is a concern for you.

## **Academic Accommodation for Religious, Indigenous or Spiritual Observances (RISO)**

Students requiring academic accommodation based on religious, indigenous or spiritual observances should follow the procedures set out in the [RISO](#) policy. Students should submit their request to their Faculty Office **normally within 10 working days** of the beginning of term in which they anticipate a need for accommodation or to the Registrar's Office prior to their examinations. Students should also contact their instructors as soon as possible to make alternative arrangements for classes, assignments, and tests.

## **Academic Integrity Statement**

You are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity. **It is your responsibility to understand what constitutes academic dishonesty.**

Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: "Grade of F assigned for academic dishonesty"), and/or suspension or expulsion from the university. For information on the various types of academic dishonesty please refer to the [Academic Integrity Policy](#), located at <https://secretariat.mcmaster.ca/university-policies-procedures-guidelines/>

The following illustrates only three forms of academic dishonesty:

- plagiarism, e.g. the submission of work that is not one's own or for which other credit has been obtained.
- improper collaboration in group work.
- copying or using unauthorized aids in tests and examinations.

## **Conduct Expectations**

As a McMaster student, you have the right to experience, and the responsibility to demonstrate, respectful and dignified interactions within all of our living, learning and working communities. These expectations are described in the [Code of Student Rights & Responsibilities](#) (the "Code"). All students share the responsibility of maintaining a positive environment for the academic and personal growth of all McMaster community members, **whether in person or online.**

It is essential that students be mindful of their interactions online, as the Code remains in effect in virtual learning environments. The Code applies to any interactions that adversely affect, disrupt, or interfere with reasonable participation in University activities. Student disruptions or behaviours that interfere with university functions on online platforms (e.g. use of Avenue 2 Learn, WebEx or Zoom for delivery), will be



taken very seriously and will be investigated. Outcomes may include restriction or removal of the involved students' access to these platforms

### **Academic Accommodation of Students with Disabilities**

Students with disabilities who require academic accommodation must contact [Student Accessibility Services](#) (SAS) at 905-525-9140 ext. 28652 or [sas@mcmaster.ca](mailto:sas@mcmaster.ca) to make arrangements with a Program Coordinator. For further information, consult McMaster University's [Academic Accommodation of Students with Disabilities](#) policy.

### **Faculty of Social Sciences E-mail Communication Policy**

Effective September 1, 2010, it is the policy of the Faculty of Social Sciences that all e-mail communication sent from students to instructors (including TAs), and from students to staff, must originate from the student's own McMaster University e-mail account. This policy protects confidentiality and confirms the identity of the student. It is the student's responsibility to ensure that communication is sent to the university from a McMaster account. If an instructor becomes aware that a communication has come from an alternate address, the instructor may not reply at his or her discretion.

### **Course Modification**

The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check his/her McMaster email and course websites weekly during the term and to note any changes.

### **Extreme Circumstances**

The University reserves the right to change the dates and deadlines for any or all courses in extreme circumstances (e.g., severe weather, labour disruptions, etc.). Changes will be communicated through regular McMaster communication channels, such as McMaster Daily News, A2L and/or McMaster email.