PSCI 2702 B Quantitative Research Methods in Political Science Tuesdays, 2:35 – 4:25 pm This course will be delivered remotely online (asynchronous)

I. GENERAL INFORMATION

Instructor:

Name: Tanvir Quadir

Email: tanvir.quadir@carleton.ca

Office Hours: Thursdays, 5:00 – 7:00 pm (Zoom)

Before emailing a question, please *fully* read this syllabus and explore the associated resources. The answers to many questions can be found in this document and students may be referred back to the syllabus if the answer is already available. Please allow at least **two (2) business days** for responses to inquiries before pursuing another route of communication.

TA:

| Name | Email | Office Hours | Responsibilities |
|----------------|---------------------------------|--------------|------------------|
| Patrick Tryba | PatrickTryba@cmail.carleton.ca | TBA | Conduct Labs, |
| | | | Grade |
| | | | Assignments |
| Chase Kelliher | chasekelliher@cmail.carleton.ca | TBA | Conduct Labs, |
| | | | Grade |
| | | | Assignments, |
| | | | Office Hours |
| Biqi Yan | biqiyan@cmail.carleton.ca | TBA | Conduct Labs, |
| | | | Grade |
| | | | Assignments, |
| | | | Office Hours |

II. COURSE DESCRIPTION

Official Description: The logic and methods of the quantitative study of politics, with emphasis on the application and interpretation of statistical techniques for data analysis.

Objectives: The overall purpose of this course is to introduce students to the field of Political Science as a social science and offer a general introduction to statistical techniques employed within field of Political Science. The immediate goal is to provide students with an understanding of some basic procedures conducted in quantitative research, combined with a focus on how research ideas are formally tested and analyzed. Topics covered will include basic data analysis using descriptive and inferential statistics.

III. COURSE FORMAT

The course will be delivered **remotely online (asynchronous)** and students MUST watch the recorded lecture by Sunday of the corresponding week to earn 3% attendance marks. Brightspace activity log will be used to award the attendance marks. The course consists of lectures 2 hours a week, and labs 1 hour a week. The laboratory sessions will give students hands-on experience of solving problems like assignments and topics covered in the classes.

| | Schedule | Modality |
|------------------------|-----------------------|----------------|
| Lectures | Tuesdays, 2:35 – 4:25 | Online |
| | pm | (Asynchronous) |
| Labs | Tuesdays, 1:35 – 2:25 | Online |
| (Starting from January | pm (B01, B02) | (Synchronous) |
| 17) | Tuesdays, 4:35 – 5:25 | |
| | pm (B04, B05) | |

DATA ANALYSIS AND SPSS: Students are required to use SPSS (Statistical Package for Social Science) for their assignments. Data used for assignment/examples are provided at Brightspace. To use SPSS, you download SPSS (<u>https://carleton.ca/its/all-services/computers/site-licensed-software/</u>) at no cost.

During the midterm and final exams, only non-programmable scientific calculators will be permitted. We reserve the right to disallow any calculator.

IV. LEARNING OUTCOMES

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

- Understand and apply core concepts in quantitative analysis, including variables and level of measurement, graphs and charts for qualitative and quantitative variables, measures of centre and variability, sampling distribution, statistical significance, cross-tabulation, measures of association, and correlation and regression.
- Get hands-on experience of analysing data using SPSS
- Build capacity to assess the methodological choices and data analyses.

V. **REQUIRED TEXTBOOK**

Essentials of Statistics for the Behavioral Sciences by Gravetter, F. J., & Wallnau, L. B., 9th or 10th edition, Thompson Wadsworth.

VI. EVALUATION AT A GLANCE

| Assessment Type | Expected Date | Weight |
|--|---|--------|
| Midterm Examination (One) (Virtual at Brightspace) | Midterm: Tuesday, February 28, 2023 (Chapters 1- 7) from 2:35 – 4:25 p.m. | 25% |
| Assignments (Two) | Assignment 1: Due on Sunday, March 5, 2023 (Chapters 1 – 7) Assignment 2: Due on Sunday, April 2, 2023 (Chapters 8 – 11) | 22% |
| Quizzes (Three)Quiz 1: Due on Thursday, January 26, 20 (Chapters 1 - 3)Quizzes (Three)Quiz 2: Due on Thursday, February 16, 20 (Chapters 4 - 7)Quiz 3: Due on Thursday, March 30, 202 (Chapters 8 - 11) | | 15% |
| Final Examination (One) (Virtual at Brightspace)Between April 15 - 27, 2023 (TBA by the Registrar Office) | | 35% |
| AttendanceLectures to be reviewed entirely in Brightspace by every Sunday of the scheduled lecture week. | | 3% |

VII. EVALUATION IN DETAIL

Each student's grade in the course will be calculated as a weighted average of scores for one midterm examination (25%), two take-home assignments (22%), three quizzes (15%), a final examination (35%), and attendance (3%). Important guidelines pertaining to the evaluation instruments are the following:

MIDTERM EXAMINATION (25%): Midterm examination will be held online at Brightspace on Tuesday, February 28, 2023, 2:35 – 4:25 pm (during class time). The midterm examination is closed-book.

ASSIGNMENT (22%) – DUE ON ASSIGNED DATES: There will be two assignments, each counting equally toward the term mark. Only one pdf file (either typed or hand-written answers) needs to be uploaded at the Brightspace. No email submissions will be accepted. Students must work independently on assignments and write up his/her own assignment but may seek guidance/direction from the professor.

FINAL EXAMINATION (35%): The 3-hour final examination will take place online at Brightspace during the official final examination period of April 15 to 27, 2023, and is scheduled by the Office. Please do not make travel plans prior to April 27, 2023. Please note that the maximum weight of the final exam MUST NOT exceed 60% of the final grade in case you miss any evaluation component (midterm or assignment or quiz) and weights are moved to the final exam weight based on documented medical reason.

VIII. ADDITIONAL COURSE POLICIES:

1. Concerns about grading on any assignment or exam must be brought to my attention within three business days of the completion of grading.

2. Students who need to miss an assignment submission or an exam for a valid reason must complete and submit the <u>self-declaration form</u> (<u>https://carleton.ca/registrar/wp-content/uploads/self-declaration.pdf</u>) prior to the assessment in order to receive accommodation. In the case of an assignment or the midterm exam, the form must be submitted to the instructor. In the case of the final exam, the form must be submitted to the Registrar's Office. For a missed assignment or midterm exam, the weight of the assignment/midterm exam will be added to the weight of the final exam. Deferred final exam scheduling is at the discretion of the University. NOTE: You cannot defer a deferred exam.

3. Late Assignment Policy: All assignments are to be submitted by their due date and time. All late submissions will be immediately docked 5%, with an additional 5% for each subsequent day

late to a maximum of 3 days, *including weekends*. After 3 days all outstanding assignments will be given a zero (0%) grade. The Faculty reserves the right to accept or refuse the reason; reasons such as travel, jobs, or any misreading of the examination timetable are not acceptable.

4. Attendance Policy: Students MUST watch the weekly recorded lectures by NO LATER THAN Sunday of the lecture week to earn the marks of attendance. It is strongly believed that there is strong correlation between students' engagement and success in the course.

5. You must use your Carleton email account for all email communications. I am unable to respond to non-Carleton emails due to FIPPA (Freedom of Information and Protection of Privacy Act).

6. All assignments in the course will be submitted online. A document entitled Submission Instructions will be posted on the course page in Brightspace. Any submissions not following the Submission Instructions will not be accepted for credit.

IX. COURSE SCHEDULE (MAY BE ADJUSTED AS COURSE UNFOLDS)

| Week | Туре | Date | Topics | Chapters |
|------|------------|---------------------|---|---------------|
| 1 | Lecture | January 10 | Day 1: Course Overview/Introduction to | Chapter |
| - | | | Statistics | 1 |
| 1 | Tutorial | January 10 | No Tutorial | <u>C1</u> |
| 2 | Lecture | January 17 | Frequency Distributions | Chapters |
| 2 | Trata | | Central Tendency | 2 and 3 |
| 2 | Tutorial | January 17 | Introduction to SPSS | Clearters |
| 2 | Lastana | Lamuamy 24 | Variability | Chapters |
| 3 | Lecture | January 24 | z-Scores: Location of Scores and | 4 and 5 |
| 2 | Trate vial | Lanuary 24 | Standardized Distributions | |
| 3 | Tutorial | January 24 | Chapters1, 2 and 3 | Chantan |
| 4 | Lastana | Lanuary 21 | | Chapters |
| 4 | Lecture | January 51 | Probability and Samples: The Distribution | o and 7 |
| 4 | T | I | of Sample Means | |
| 4 | Tutorial | January 31 | Chapters 4 and 5 | Charten |
| 5 | Lecture | February 7 | Introduction to Hypothesis Testing | Chapter 8 |
| 5 | Tutorial | February 7 | Chapters 6 and 7 | 0 |
| | T (| F1 14 | Review of Chapters 1 – 7 (for Midterm | |
| 6 | Lecture | February 14 | Exam) | |
| 6 | Tutorial | February 14 | Assignment 1 Help Session | |
| | | February 20 - 24 | Winter Break (No Class) | |
| 7 | Lecture | February 28 | Midterm Exam (Chapters 1 – 7) | |
| 7 | Tutorial | February 28 | No Tutorial | |
| 8 | Lecture | March 7 | Introduction to the t-statistic | Chapter 9 |
| 8 | Tutorial | March 7 | Chapters 8 and 9 | |
| 9 | Lecture | March 14 | The t Test for Two Independent Samples | Chapter 10 |
| 9 | Tutorial | March 14 | Chapter 10 | |
| 10 | Lecture | March 21 | The t Test for Dependent Samples | Chapter 11 |
| 10 | Tutorial | March 21 | Chapter 11 | |
| 11 | Lecture | March 28 | Introduction to Analysis of Variance | Chapter 12 |
| 11 | Tutorial | March 28 | Assignment 2 Help Session | |
| 12 | Lecture | April 4 | Correlation and Regression | Chapter 14 |
| 12 | Tutorial | April 4 | Chapter 12 | |
| 13 | Lecture | April 11 | Review of Chapters 8 – 12, 14 | |
| 13 | Tutorial | April 11 | Chapter 14 | |

Covid-19 Information

It is important to remember that COVID is still present in Ottawa. The situation can change at any time and the risks of new variants and outbreaks are very real. There are <u>a number of actions</u> you can take to lower your risk and the risk you pose to those around you including being vaccinated, wearing a mask, staying home when you're sick, washing your hands and maintaining proper respiratory and cough etiquette.

Feeling sick? Remaining vigilant and not attending work or school when sick or with symptoms is critically important. If you feel ill or exhibit COVID-19 symptoms do not come to class or campus. If you feel ill or exhibit symptoms while on campus or in class, please leave campus immediately. In all situations, you must follow Carleton's <u>symptom reporting protocols</u>.

Masks: On the recommendation of Ottawa Public Health, Carleton will be maintaining the mandatory <u>COVID-19 Mask Policy</u> until further notice. The policy requires masks to be worn in all university buildings, including offices, classrooms and labs.

Vaccines: Further, while proof of vaccination is no longer required as of May 1 to attend campus or in-person activity, it may become necessary for the University to bring back proof of vaccination requirements on short notice if the situation and public health advice changes. Students are strongly encouraged to get a full course of vaccination, including booster doses as soon as they are eligible, and submit their booster dose information in <u>cuScreen</u> as soon as possible. Please note that Carleton cannot guarantee that it will be able to offer virtual or hybrid learning options for those who are unable to attend the campus.

All members of the Carleton community are required to follow requirements and guidelines regarding health and safety which may change from time to time. For the most recent information about Carleton's COVID-19 response and health and safety requirements please see the <u>University's COVID-19 website</u> and review the <u>Frequently Asked Questions (FAQs)</u>. Should you have additional questions after reviewing, please contact <u>covidinfo@carleton.ca</u>.

Requests for Academic Accommodation

You may need special arrangements to meet your academic obligations during the term. For an accommodation request, the processes are as follows:

Pregnancy accommodation: Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website: <u>carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf.</u>

Religious accommodation: Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for

accommodation is known to exist. For more details, visit the Equity Services website: <u>carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf</u>.

Accommodations for students with disabilities: If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or pmc@carleton.ca for a formal evaluation or contact your PMC coordinator to send your instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, reach out to your instructor as soon as possible to ensure accommodation arrangements are made. For more information, please visit carleton.ca/pmc.

Accommodation for student activities: Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who engage in student activities at the national or international level. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf.

For more information on academic accommodation, please contact the departmental administrator or visit: <u>students.carleton.ca/course-outline.</u>

Sexual Violence Policy

As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated. Survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: <u>carleton.ca/sexual-violence-support</u>.

<u>Plagiarism</u>

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 includes 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. Examples of sources from which the ideas, expressions of ideas or works of others may be drawn from include but are not limited to: books, articles, papers, literary compositions and phrases, performance compositions, chemical compounds, art works, laboratory reports, research results, calculations and the results of calculations, diagrams, constructions, computer reports, computer code/software, material on the internet and/or conversations.

Examples of plagiarism include, but are not limited to:

• any submission prepared in whole or in part, by someone else;

- using ideas or direct, verbatim quotations, paraphrased material, algorithms, formulae, scientific or mathematical concepts, or ideas without appropriate acknowledgment in any academic assignment;
- using another's data or research findings without appropriate acknowledgement;
- submitting a computer program developed in whole or in part by someone else, with or without modifications, as one's own; and
- failing to acknowledge sources through the use of proper citations when using another's work and/or failing to use quotations marks.

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.

More information on the University's Academic Integrity Policy can be found at: <u>https://carleton.ca/registrar/academic-integrity/</u>.

Intellectual property

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).

Submission and Return of Term Work

Papers must be submitted directly to the instructor according to the instructions in the course outline. During the COVID-19 pandemic, the departmental office will not accept assignments submitted in hard copy.

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:

| Percentage | Letter grade | 12-point scale | Percentage | Letter grade | 12-point scale |
|------------|--------------|----------------|------------|--------------|----------------|
| 90-100 | A+ | 12 | 67-69 | C+ | 6 |
| 85-89 | А | 11 | 63-66 | С | 5 |
| 80-84 | A- | 10 | 60-62 | C- | 4 |
| 77-79 | B+ | 9 | 57-59 | D+ | 3 |
| 73-76 | В | 8 | 53-56 | D | 2 |
| 70-72 | B- | 7 | 50-52 | D- | 1 |

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 Brightspace. As important course and university information is distributed this way, it is the student's responsibility to monitor their Carleton University email accounts and Brightspace.

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. By hosting social events, including Model Parliament, debates, professional development sessions and more, 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 our networking opportunities, academic engagement initiatives and numerous events which aim to complement both academic and social life at Carleton University. To find out more, visit us on Facebook https://www.facebook.com/CarletonPoliticalScienceSociety/.

Official Course Outline

The course outline posted to the Political Science website is the official course outline.