



DEPARTMENT OF POLITICAL SCIENCE
FACULTY OF ARTS

POLI 691 – L01
Quantitative Analysis in Political Science
Fall 2020

INSTRUCTOR	Melanee Thomas
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EMAIL	thomasm@ucalgary.ca
OFFICE HOURS	by appointment only, to be held on Zoom. To book, to go https://thomasm.youcanbook.me
COURSE DAY/TIME	TR 11 AM to 1215 PM
DELIVERY METHOD	web-based HYBRID – asynchronous content + synchronous class each Thursday during scheduled time (11 AM to 1215 PM)
TUTORIALS	W 9 to 1030 AM (synchronous + recorded) R 1230 to 2 PM (drop in support) R 2 to 330 PM (drop in support)

COURSE DESCRIPTION

POLI 691 is a hands-on course designed to introduce you to the fundamentals of, and theoretical framework behind the quantitative research process in political science. You will learn the steps required to complete an empirical political science research project: what questions to ask, how to design and implement the project, how to operationalize theoretical concepts, and how to collect and analyse data. In so doing, you will become more proficient at research yourself, and you should also become a more informed, critical consumer of both scientific and popular literature on politics. Though this course may be more demanding than many others you might take, you will acquire skills and knowledge that will be valuable to you in all your future classes and future careers.

POLI 399 AND POLI 691

This course is offered concurrently with POLI 399, the undergraduate methods course offered in the department. As graduate students registered in POLI 691, you will work through the lecture and tutorial material provided for POLI 399. However, POLI 691 will differ in several ways from its undergraduate equivalent. Your assignments will differ from those of the 399 students, the reading load is heavier, and I will grade all of your coursework. Finally, I encourage you to meet with me regularly if you have any questions about the lectures and/or the tutorials.

COURSE OBJECTIVES & LEARNING OUTCOMES

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

- Identify and critique key elements of the scientific method, as it applies to political science;
- Identify and critique measurement/operationalization options in empirical political science;
- Identify and outline key steps and assumptions associated with analytical common methods in empirical political science, including, but not limited to sample design, survey research, experiments, cross tabulations, descriptive and inferential statistics, and regression analysis;
- Critique the use of common analytical methods in empirical political science;
- Explain basic statistics and explanatory relationships using their own words;
- Develop a working knowledge of Stata, including explaining Stata commands in their own words.

COVID-19 PANDEMIC CONSIDERATIONS AND TECHNOLOGY REQUIREMENT

Due to COVID-19, POLI 691 will be offered remotely as a hybrid course in Fall 2020. Some course content will be provided asynchronously, and students will be required to work through that content prior to our synchronous class on Thursdays. Given this, students need a computer with an internet connection.

ACCOMMODATIONS

Students registered with Student Accessibility Services (SAS) should contact me as soon as possible, as this facilitates us arranging the support you need.

Students facing COVID-19 specific challenges – essential worker designation, childcare or other caring responsibilities, existential dread, and so on – are should also contact me ASAP to arrange support.

Accommodations for acute illness and emergencies, as well as accommodations on protected grounds (race; colour; ancestry; place of origin; religious beliefs; gender — including pregnancy and gender identity; marital status; family status; source of income; and sexual orientation) will be addressed on a case by case basis in accordance with University of Calgary policy (see <https://www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf>).

REQUIRED MATERIALS

The following textbook is available for purchase at the university bookstore:

Haan, Michael and Jenny Godley. 2017. *An Introduction to Statistics for Canadian Social Scientists*. Don Mills: Oxford University Press.

TEXTBOOKS

The following textbook is available for purchase at the university bookstore:

Noack, Andrea M. 2018. *Social Statistics in Action: A Canadian Introduction*. Don Mills: Oxford University Press.

The following textbook is available full text from the library:

King, Gary, Robert O. Keohane, and Sidney Verba. 1994. *Designing Social Inquiry: Scientific Inference in Qualitative Research*. Princeton: Princeton University Press.

Supplementary texts include:

Bouma, Gary D. Rod Ling, and Lori Wilkinson. 2012. *The Research Process, Second Canadian Edition*. Don Mills: Oxford University Press.

Roberts, Lance W. Jason Edgerton, Tracey Peter, and Lori Wilkinson. 2015. *Understanding Social Statistics*. Don Mills, ON: Oxford University Press.

Videos and readings for each topic and tutorial may also be posted to D2L. These comprise the asynchronous portion of the course. Some of these readings are journal articles; accessing them is easier with a University of Calgary VPN. Information on obtaining a University of Calgary VPN is here: <http://www.ucalgary.ca/it/networks/vpn>.

Students will also be learning a statistics program called **Stata**. This will be **accessible remotely for free** via the Faculty of Arts computer labs, but students will need the University of Calgary's VPN to access the lab remotely, as well as additional downloads if they are Mac/Apple users. Detailed steps are provided on D2L.

Students may choose to purchase access to Stata for \$48USD for 6 months. To do this, visit this website and choose **Stata/IC** for 6 months: <https://www.stata.com/order/new/edu/gradplans/student-pricing/>. If you do this route, do **NOT** pay for one of the more expensive options: those are upsells for things you will never need in this course.

Students' experience of POLI 399, both in class and in tutorial, will be far more pleasant and useful if you take the time to prepare the material *before* coming to class/tutorial.

COURSE COMPONENT WEIGHTS AND DUE DATES:

COMPONENT	WEIGHTING	DUE DATES
Asynchronous Lecture Exercises	15%	Weekly, prior to Thursday's synchronous sessions, on D2L
Tutorial Exercises	20%	Throughout the term, on D2L
Quiz #1	10%	October 1, in class
Quiz #2	10%	November 5, in class
Research Paper: Outline	15%	October 22, 2020 on D2L
Research Paper: Complete Draft	30%	December 10, 2020 on D2L
Total	100%	

If a student misses a required course component, please get in touch with the instructor as soon as possible.

GRADE SCALE

A+	=	90-100	B+	=	75-79	C+	=	63-66	D+	=	53-56
A	=	85-89	B	=	70-74	C	=	60-62	D	=	50-52
A-	=	80-84	B-	=	67-69	C-	=	57-59	F	=	0-49

Writing Statement:

Written assignments are often required in Political Science courses, including this one, and the quality of writing skills, including but not limited to such elements as grammar, punctuation, sentence structure, clarity, citation, and organization, will be considered in the determination of grades. Students are encouraged to make use of the services offered through Writing Support Services in the Student Success Centre (3rd floor of the Taylor Family Digital Library) or at <http://www.ucalgary.ca/ssc/writing-support>.

LATE POLICY

Given the current COVID context, I expect we'll all encounter things over the next few months that might make completing course work challenging. My commitment to you is to be flexible, open, and understanding. We're all in this together.

If things remain steady, without any major changes to university operations as we understand them to be now, then I have the following expectations about when students will submit course work:

- Due to COVID-19, most assignments will not be due during class time. Instead, asynchronous lecture exercises, tutorial exercises, and the two components of the research report will be due on D2L at 11 pm on their stated due date.
- In general, extensions will not be provided for lecture or tutorial exercises, as these are designed to help students process the material each week. The grades are an incentive to help students avoid falling behind. If/when students do fall behind, please contact me ASAP.
- Extensions are typically NOT granted for the Research Paper outside of exceptional, documented instances of illness or personal/family emergencies. Late research report submissions will be deducted a letter gradation per day (A to A-, A- to B+, and so on) including weekend days. **Reports will not be accepted 7 calendar days after the due date.**

ASYNCHRONOUS LECTURE EXERCISES

These exercises will consist of multiple choice, fill in the blank, or very short answer questions, and address material presented in asynchronous lecture videos posted on D2L. These exercises are designed to assess how well students are digesting the material. Students will typically have several days to complete these exercises.

While students are encouraged to discuss this material with each other, the work submitted must be their own.

TUTORIAL EXERCISES

Tutorial exercises are designed to teach you how to use Stata to analyse data. The content required

for each tutorial will be posted that week on D2L. These exercises may consist of multiple choice, fill in the blank, or short answer questions. These exercises are designed to assess how well students are learning Stata. As a result, students will typically be required to upload their work in Stata to the Assignment Dropbox on D2L.

While students are encouraged to discuss this material with each other, the work submitted must be their own.

QUIZZES

Two take-home quizzes throughout the term. The quizzes will cover material presented in lectures, readings, and tutorials. Each quiz will be conducted asynchronously on D2L and be available for approximately 48 hours. Quizzes are open book and may consist of multiple choice, fill in the blank, short answer, and essay questions.

Students are expected to complete quizzes online in a manner similar to an in-class quiz: discussion between students about the quizzes is prohibited, and the work students submit must absolutely be their own.

The Department of Political Science requires that any student who misses a scheduled quiz for legitimate reasons (i.e. illness or personal/family emergency with documentation,) are responsible for contacting me via email **within 48 hours** of the missed quiz to discuss alternative arrangements. A copy of this email may be requested as proof of the attempt to contact the instructor. Any student who fails to do so may forfeit the right to a makeup quiz.

RESEARCH PAPER

A research paper documents the results of a research project. Your research project could involve establishing several hypotheses about political behaviour, based on published research, and testing these hypotheses statistically with something like the Canadian Election Study. Alternatively, students can choose to use a dataset that addresses their research interests more directly; they need only ensure that they speak with me about any data set they would like to use and, if possible, provide me with information that allows me to access the data myself. If your proposed thesis project is empirical, please book an appointment so we can assess if your 691 report can be used as a trial, or pilot study of your thesis project.

The research report will be completed in two stages. Students are first required to complete the outline. The outline requires a bibliography for their research question (with a minimum of 10 sources), a causal model of the hypotheses that they will test with their data, and a breakdown of the variables that you plan to use to operationalize the measures employed in the analysis. This part of the report is due on October 22. **Effort put into the outline typically pays off considerably later in the term.** Second, students must complete empirical/statistical analysis and write up their full research report. The final report should be no more than 6000 words. Further information about this assignment will be provided in class or on D2L.

INFO ABOUT TEACHING ASSISTANTS, MEETINGS, AND EMAILS

Students in POLI 691 have access to two TAs who are their peers in the graduate program. Under normal circumstances, TAs would run each tutorial in person in the Arts computer lab; now, TAs will be available for you during the 2 drop-in tutorial support sessions. The synchronous tutorial will be conducted by me or one of the TAs and recorded.

Please direct all emails to me, rather than to your TAs. My policy is to respond to e-mails within 24-48 hours on weekdays. Students should not expect email responses on weekends, except in an emergency. Please try to follow the advice presented here:

<https://medium.com/@lportwoodstacer/how-to-email-your-professor-without-being-annoying-afcf64ae0e4087>. The advice offered is excellent from a professional development perspective, and students should be in, or develop the habit of sending professional emails to their instructors.

COURSE SCHEDULE AND REQUIRED READINGS

This schedule is tentative and subject to change. Not all topics will be given equal time of weight.

A detailed schedule with readings is available on D2L.

- INTRODUCTION TO CLASS
- **TOPIC 1: How do you know?**
 - How do you know something is “true”? How do we agree on what counts as evidence? How can we fit evidence into a system that helps us explain the political world? How do we observe the things political scientists care about, such as power or democracy?
 - Topics may include the Scientific Method, Concepts and Theories, Variables and Hypotheses, Moving from Concepts to Variables
- **TOPIC 2: How do we measure?**
 - Once we’ve decided what variables we want to use, how do we go about actually measuring them?
 - Topics may include Measurement, Measurement Validity, Measurement Reliability
- **TOPIC 3: How do we set up a study?**
 - How do we know when we can say “A causes B”? How can we study a population with a sample?
 - Topics may include Research Design, Causal Thinking, Experiments, Control Variables, Designing a Sample, Estimating Sampling Error, Estimating Sampling Size
- **TOPIC 4: Statistics**
 - What statistics are useful in political science? When do we use statistics? How do we use statistics to generate evidence in political science? Which statistics do we choose? How do we interpret the numbers the computer generates?
 - Topics may include Describing Variables, Statistical Significance, Crosstabulations, Interpreting the Effects of Control Variables, Regression Analysis
- **TOPIC 5: Ethics**

- What ethical considerations must we consider when we use quantitative methods in research?
- REVIEW

Tutorials are mandatory; a detailed TUTORIAL SCHEDULE is available on D2L. **Tutorials begin the week after add/drop on September 23, 2020.**

IMPORTANT POLICIES AND INFORMATION

Supporting Documentation and the Use of a Statutory Declaration

As stated in the University Calendar:

Students may be asked to provide supporting documentation for an exemption/special request. This may include, but is not limited to, a prolonged absence from a course where participation is required, a missed course assessment, a deferred examination, or an appeal. Students are encouraged to submit documentation that will support their situation. Supporting documentation may be dependent on the reason noted in their personal statement/explanation provided to explain their situation. This could be medical certificate/documentation, references, police reports, invitation letter, third party letter of support or a statutory declaration etc. The decision to provide supporting documentation that best suits the situation is at the discretion of the student. Students cannot be required to provide specific supporting documentation, such as a medical note.

Students can make a Statutory Declaration as their supporting documentation (available at ucalgary.ca/registrar). This requires students to make a declaration in the presence of a Commissioner for Oaths. It demonstrates the importance of honest and accurate information provided and is a legally binding declaration. Several registered Commissioners for Oaths are available to students at no charge, on campus. For a list of locations to access a Commissioner for Oaths, visit ucalgary.ca/registrar).

Falsification of any supporting documentation will be taken very seriously and may result in disciplinary action through the Academic Discipline regulations or the Student Non-Academic Misconduct policy.

This statement is accessible at: <https://www.ucalgary.ca/pubs/calendar/current/m-1.html>

Absence From a Mid-term Examination

Students who are absent from a scheduled term test or quiz for legitimate reasons are responsible for contacting the instructor via email within 48 hours of the missed test to discuss alternative arrangements. A copy of this email may be requested as proof of the attempt to contact the instructor. Any student who fails to do so forfeits the right to a makeup test.

Deferral of a Final Examination

Deferral of a final examination can be granted for reasons of illness, domestic affliction, and unforeseen circumstances, as well as to those with three (3) final exams scheduled within a 24-hour period. Deferred final exams will not be granted to those who sit the exam, who have made travel arrangements that conflict with their exam, or who have misread the examination timetable. The decision to allow a deferred final exam rests not with the instructor but with Enrolment Services. Instructors should, however, be notified if you will be absent during the examination. The Application for Deferred Final Exam, deadlines, requirements and submission instructions can be found on the Enrolment Services website at <https://www.ucalgary.ca/registrar/exams/deferred-exams>.

Appeals

If a student has a concern about the course or a grade they have been assigned, they must first discuss their concerns with the instructor. If this does not resolve the matter, the student then proceed with an academic appeal. The first step in an academic appeal is to set up a meeting with the Department Head. Appeals must be requested within 15 days of receipt of the graded assignment.

University Regulations

Students are responsible for familiarizing themselves with the University policies found in the Academic Regulations sections of the Calendar at www.ucalgary.ca/pubs/calendar/current/academic-regs.html.

Student Accommodations

Students seeking an accommodation based on disability or medical concerns should contact Student Accessibility Services; SAS will process the request and issue letters of accommodation to instructors. For additional information on support services and accommodations for students with disabilities, visit www.ucalgary.ca/access/.

Students who require an accommodation in relation to their coursework based on a protected ground other than disability should communicate this need in writing to their Instructor.

The full policy on Student Accommodations is available at <http://www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf>.

Plagiarism and Other Forms of Academic Misconduct

Academic misconduct in any form (e.g. cheating, plagiarism) is a serious academic offence that can lead to disciplinary probation, suspension or expulsion from the University. Students are expected to be familiar with the standards surrounding academic honesty; these can be found in the University of Calgary calendar at <http://www.ucalgary.ca/pubs/calendar/current/k.html>. Such offences will be taken seriously and reported immediately, as required by Faculty of Arts policy.

Required Access to Technology

Please see the University's resource page at https://ucalgary.service-now.com/it?id=kb_article&sys_id=86e7438013753ac06f3afbb2e144b031

Copyright Legislation

As stated in the University of Calgary Calendar, Academic Regulations, “students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright and requirements of the copyright act to ensure they are aware of the consequences of unauthorised sharing of course materials (including instructor notes, electronic versions of textbooks etc.). Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy.”

<https://www.ucalgary.ca/policies/files/policies/acceptable-use-of-electronic-resources-and-information-policy.pdf> and <https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html>

Instructor Intellectual Property

Course materials created by instructors (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the instructor. These materials may NOT be reproduced, redistributed or copied without the explicit consent of the instructor. The posting of course materials to third party websites such as note-sharing sites without permission is prohibited. Sharing of extracts of these course materials with other students enrolled in the course at the same time may be allowed under fair dealing.

Freedom of Information and Protection of Privacy (FOIP)

FOIP legislation requires that instructors maintain the confidentiality of student information. In practice, this means that student assignment and tests cannot be left for collection in any public place without the consent of the student. It also means that grades cannot be distributed via email. Final exams are kept by instructors but can be viewed by contacting them or the main office in the Department of Political Science. Any uncollected assignments and tests meant to be returned will be destroyed after six months from the end of term; final examinations are destroyed after one year.

Faculty of Arts Program Advising and Student Information Resources

For program planning and advice, please consult with the Arts Students’ Centre by calling 403-220-3580 or by email at artsads@ucalgary.ca. You can also visit arts.ucalgary.ca/advising for program assistance.

For registration (add/drop/swap), paying fees and assistance with your Student Centre, contact Enrolment Services at (403) 210-ROCK [7625].

Important Contact Information

Faculty of Arts Undergraduate Students’ Union Representatives

Phone: 403-220-6551

Email: arts1@su.ucalgary.ca, arts2@su.ucalgary.ca, arts3@su.ucalgary.ca,
arts4@su.ucalgary.ca

Students’ Union URL: www.su.ucalgary.ca

Graduate Students’ Association

Phone: 403-220-5997

Email: askgsa@ucalgary.ca
URL: www.ucalgary.ca/gsa

Student Ombudsman
Phone: 403-220-6420
Email: ombuds@ucalgary.ca

Campus Mental Health Resources

The University of Calgary recognizes the pivotal role that student mental health plays in physical health, social connectedness and academic success, and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the excellent mental health resources available throughout the university community, such as counselling, self-help resources, peer support or skills-building available through the following resources:

SU Wellness Centre: <http://www.ucalgary.ca/wellnesscentre/>

Student Wellness Services:
<https://www.ucalgary.ca/wellness-services/services/mental-health-services>

Campus Mental Health Strategy website: <https://www.ucalgary.ca/mentalhealth/>.