



DEPARTMENT OF POLITICAL SCIENCE
FACULTY OF ARTS

POLI 691 – L01
Quantitative Analysis in Political Science
Fall 2021

INSTRUCTOR	Melanee Thomas
TELEPHONE	(403) 220-5992
OFFICE	SS 714
EMAIL	thomasm@ucalgary.ca
OFFICE HOURS	By appointment only. Please email me to book
COURSE DAY/TIME	Thursdays, 930 to 1045 AM
DELIVERY METHOD	HYBRID/blended
COURSE LOCATION	KNB 126
TUTORIALS	W 9 to 1030 AM (SS 020) T 1230 to 2 PM (SS 020) M 12 to 130 PM (SS 020)
TEACHING ASSISTANTS	Zachary Pfeifer (zachary.pfeifer@ucalgary.ca) Reed Merrill (reed.merrill@ucalgary.ca)

COURSE DESCRIPTION

POLI 691 is a hands-on course designed to introduce you to the fundamentals of, and theoretical framework behind the empirical 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, albeit on the POLI 691 D2L shell. 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 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 and COURSE DELIVERY METHOD

The risk from COVID-19 remains very real. Given that, my actions and decisions will be guided by the following principles:

1. Health and wellbeing are my first priority: yours, your families', and mine
2. Our classroom needs to feel like a safe place, physically and intellectually
3. Fairness means taking students' circumstances into account

We all need to be mindful of keeping one another healthy. If you have not yet been fully vaccinated for COVID-19, I strongly encourage you to do so. It will help keep us all safe.

Please always wear a mask in class and in tutorial.

If you or someone in your household is feeling ill, ***please do not come to class.***

The course is a hybrid delivery to accommodate this very reason as it arises throughout the term. All the lectures will be made available asynchronously; as a result, we will ONLY meet as a class on Thursdays during our regularly scheduled time to discuss and work further with the material. Students who are not able to come to class because they are ill will NOT be penalized. The in-person sessions will clarify the material, but all the content students need to excel will be in the asynchronous videos.

Tutorials are also flipped, where your prep is watching a video before completing the tutorial synchronously in the computer lab OR via remote access with TA support. Regardless of the tutorial mode you attend – in person or remote – students are required to attend their scheduled,

assigned tutorial.

Here's what I can promise you: I have been double vaccinated since June (both mRNA). I will always wear a mask in class, and if I am not feeling well or am confirmed to be sick, I'll switch our in-person sessions to Zoom to avoid coming to campus. The same holds for our TAs – if they are not well, they will not attend in-person tutorials. We'll follow known best practices to keep each other safe: vaccines, masking, distancing, and staying home when unwell.

ACCOMMODATIONS

My general guiding principle is this: POLI 691 is already a challenging class. It should not be made more so by circumstances that students cannot control.

If you are struggling with anything, please let me know as soon as possible. I'm committed to working with you to help find a way to accommodate or work with your circumstances.

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:

Berdahl, Loleen and Jason Roy. 2021. *Explorations: Conducting Empirical Research in Canadian Political Science*. Toronto: Oxford University Press.

There are earlier versions of this text that will **NOT be equivalent**; students must purchase this most recent version of the text.

The following textbook is available full text from the library and offers an interesting, albeit readily critiqued view of empirical research:

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

Supplementary texts that may help you as the term progresses 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.

While the readings for this course will rely predominantly on the text, videos and readings for each topic and tutorial may also be posted to D2L. Some of these readings may be 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 for free** in the Faculty of Arts computer labs in person and via remote access. FYI: you will need a VPN to access the labs remotely. Students may choose to purchase access to Stata for \$48USD for 6 months. To do this, visit this website and choose **Stata/BE** for 6 months: <https://www.stata.com/order/new/edu/gradplans/student-pricing/>. If you go 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 691, 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
Tutorial Exercises	20%	Throughout the term, on D2L
Asynchronous Lecture Exercises	12.5%	D2L, weekly, due 1159 PM Fridays
Quiz #1	12.5%	D2L, to be completed October 5
Quiz #2	12.5%	D2L, to be completed November 4
Research Paper: Outline	12.5%	Uploaded to D2L by October 21
Final Research Paper	30%	Uploaded to D2L by December 7
Total	100%	

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.

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

- IF THE AFC LABS ARE SAFE and you feel safe in them, then Tutorial assignments must be completed during your scheduled tutorial. If you are feeling unwell or have a confirmed COVID infection, ***please do not come to tutorial***. Instead, if you're well enough, please complete your tutorial remotely during your scheduled tutorial time. If you are NOT well enough, please contact me ASAP for an accommodation.
- The AFC labs have limited space, so it is especially important for students attending tutorials, regardless of mode, to stick to their assigned tutorial each week.
- Asynchronous lecture exercises should be completed each week, as scheduled.

In the absence of (ideally pre-arranged) accommodations, late tutorial and asynchronous lecture exercises may not be accepted, and 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. **But, if you need an accommodation, just ask for it!**

TAs may not grant extensions or accommodations. Instead, students are encouraged to speak with me as early as possible if they encounter any situation or circumstances that are making it difficult for them to meet the course requirements.

TUTORIAL EXERCISES

Tutorial exercises are designed to teach you how to use Stata to analyse data. Instructional videos will teach you progressively more complicated skills each week. Then, in tutorial, students will be given access to an assignment, typically on D2L, to complete during your tutorial time with TA support. Tutorial 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.

Students must complete their tutorials during their assigned tutorial time in the Arts Computer Labs (SS 020). The lab can be access in person AND by remote access. TAs will be there to provide one-on-one support in person and via Zoom.

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

ASYNCHRONOUS LECTURE EXERCISES

These exercises are open-book and will be conducted weekly via the Quiz function on D2L. This ensures that students who are not able to attend class because of COVID are not penalized. These

exercises are designed to help me assess how well students are digesting the lecture material in real time.

QUIZZES

There are two in-class quizzes throughout the term (due on October 5 and due on November 4). The quizzes will cover material presented in lectures, textbook, and tutorials. Quizzes may consist of multiple choice, fill in the blank, short answer, and essay questions.

Quizzes are administered via D2L. They are open book, with generous timing provisions.

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 should be based on your proposed thesis topic, or on a closely related area of study. The goal is to ensure your work produced in POLI 691 is useful for your research agenda.

Papers should follow the following guidelines:

- Write a lit review on your chosen dissertation/thesis topic
 - Focus on operationalization (definitions)
 - Focus on questions, relationships, building to hypotheses
- Write a research design that would answer those questions
- Describe the data you would need to use and why
 - Primary or secondary data?
 - If primary, how will you gather it?
 - If secondary, how will you get it?
 - What ethics considerations must you consider?
- If secondary data exist, the paper can and should include an analysis of those data.

The emphasis students place on each component will be determined by their chosen topic. Given this, I strongly advise students to meet with me regularly to ensure their work is on the right track.

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), an explanation of if and why their proposed paper will focus more on operationalization or on empirical analysis, and if empirical, what dataset and variables will be used in the analysis. This part of the report is due on D2L October 21. **Effort put into the outline typically pays off considerably later in the term.** Second, students must write up their full research report, including all theoretical operationalization and data analysis, if relevant. The final report should

be no more than 6000 words. Further information about this assignment will be provided in class or on D2L.

Research reports are due on D2L by 1159 PM on December 7, 2021.

INFO ABOUT TEACHING ASSISTANTS, MEETINGS, AND EMAILS

Students in 691 will have access to the POLI 399 TAs – Zachary Pfeifer and Reed Merrill for real-time support during tutorials. However, because the TAs are your colleagues, they are not permitted to grade your work. You should access them as they're great supports, but otherwise, all substantive questions should be directed to me.

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 20, 2021.**

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 Commissioners 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>.

Reappraisals

The University Calendar states that for reappraisals of graded term work:

“A student who feels that a piece of graded term work (term paper, essay, test, etc.) has been unfairly graded, may have the work reappraised as follows. The student shall discuss the work with the instructor **within ten business days** of being notified about the mark or of the item’s return to the class. If not satisfied, the student shall take the matter to the head of the department offering the course **within 2 business days of receiving the decision from the instructor**, who will arrange for a reappraisal of the work **within the next ten business days**. The reappraisal will only be considered if the student provides a detailed rationale that outlines where and for what reason an error is suspected.” See <https://www.ucalgary.ca/pubs/calendar/current/i-2.html>

The University Calendar states that for reappraisal of academic assessments (final grades):

“A student may request a reappraisal of a final grade. The only element that will be considered is the final assessment(s) that makes up the final mark (e.g., final examination, final project, and final paper). The exception is when a grade for a piece of graded term work is made available to students after the last day of classes for the term in which the course is scheduled; that grade may also be considered in a reappraisal of the final grade.”

“A student seeking a reappraisal of a final grade should first attempt to review the final assessment with the department or faculty offering the course. After which the student shall obtain a Reappraisal of Final Grade form from ucalgary.ca/registrar (under Student Forms). The student must indicate exactly what error was made in marking the final assessment and/or in computing the final grade. The reappraisal will only be considered if the student provides a detailed rationale that outlines where and for what reason an error is suspected.” More information is available at: <https://www.ucalgary.ca/pubs/calendar/current/i-3.html>

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-ow.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-material-protected-by-copyright.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.

Evacuation Assembly Points

In the event of an emergency evacuation from class, students are required to gather in designated assembly points. Please check the list found at www.ucalgary.ca/emergencyplan/assemblypoints and note the assembly point nearest to your classroom.

Faculty of Arts Program Advising and Student Information Resources

For program planning and advice, visit the Arts Students' Centre in Social Sciences 102, call 403-220-3580 or email 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] or visit their office in the MacKimmie Tower, MT 116..

Important Contact Information

Campus Security and Safewalk (24 hours a day/7 days a week/365 days a year)
Phone: 403-220-5333

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/>.