DEPARTMENT OF POLITICAL SCIENCE
FACULTY OF ARTS

POLI 399 – L01
Quantitative Research Methods
Fall 2021

INSTRUCTOR
Melanee Thomas
TELEPHONE
(403) 220-5992
OFFICE
SS 714
EMAIL
thomasm@ucalgary.ca
OFFICE HOURS
By appointment only. To book, go to https://thomasm.youcanbook.me

COURSE DAY/TIME
Thursdays, 9:30 to 10:45 AM
DELIVERY METHOD
HYBRID/blended
COURSE LOCATION
KNB 126

TUTORIALS
W 9 to 10:30 AM (SS 020)
T 12:30 to 2 PM (SS 020)
M 12 to 1:30 PM (SS 020)

TEACHING ASSISTANTS
Zachary Pfeifer (zachary.pfeifer@ucalgary.ca)
Reed Merrill (reed.merrill@ucalgary.ca)

COURSE DESCRIPTION
POLI 399 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.
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 399 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](https://www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf)).

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


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

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](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/](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 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:**

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>WEIGHTING</th>
<th>DUE DATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutorial Exercises</td>
<td>20%</td>
<td>Throughout the term, on D2L</td>
</tr>
<tr>
<td>Asynchronous Lecture Exercises</td>
<td>10%</td>
<td>D2L, weekly, due 1159 PM Fridays</td>
</tr>
<tr>
<td>Quiz #1</td>
<td>12.5%</td>
<td>D2L, to be complete October 5</td>
</tr>
<tr>
<td>Quiz #2</td>
<td>12.5%</td>
<td>D2L, to be complete November 4</td>
</tr>
<tr>
<td>Research Report</td>
<td>25%</td>
<td>Uploaded to D2L by November 30</td>
</tr>
<tr>
<td>Final Exam (2 hours)</td>
<td>20%</td>
<td>Scheduled by Registrar</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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**GRADE SCALE**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage Range</th>
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<tr>
<td>A+</td>
<td>90-100</td>
</tr>
<tr>
<td>A</td>
<td>85-89</td>
</tr>
<tr>
<td>B+</td>
<td>75-79</td>
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<tr>
<td>B</td>
<td>70-74</td>
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<tr>
<td>C+</td>
<td>63-66</td>
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<tr>
<td>C</td>
<td>60-62</td>
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<tr>
<td>D+</td>
<td>53-56</td>
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<td>D</td>
<td>50-52</td>
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<tr>
<td>A-</td>
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<td>B-</td>
<td>67-69</td>
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<td>C-</td>
<td>57-59</td>
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<tr>
<td>F</td>
<td>0-49</td>
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</tbody>
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**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](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 may forfeit the right to a makeup quiz.
**RESEARCH REPORT**
A research report documents the results of a research project. Your research project will involve establishing a hypothesis about political behaviour, based on published research, and testing this hypothesis statistically with the data sets provided on D2L – the 2019 Canadian Election Study, or the 2020 American National Election Study. In the unlikely event that the 2021 Canadian Election Study is made available before the end of term, students can also use those data if they wish.

The research report has two parts. The first part requires students to outline the hypothesis they wish to test, alongside three control variables. The second part builds on the first by testing the presented causal logic. Students may choose to use crosstabulations or regression analysis for this component.

More information will be provided in class and on D2L.

Research reports are due on D2L by 1159 PM on November 30, 2021.

**I strongly advise students to meet with me about the hypothesis and causal logic before November 4, 2021.**

**FINAL EXAM**
A final exam – scheduled by the Registrar – will take place during the examination period (December 13-22, 2021). The exam will cumulatively cover material from the lectures, readings, and tutorials.

Because this is a hybrid/blended course, the final exam will be administered on D2L. Calendar provisions may require that this exam only be made available during a single 24 hour period. Like the quizzes, the final exam is open book, and may consist of multiple choice, fill in the blank, short answer, and essay questions.

The last class of the term – December 7, 2021 – is exclusively final exam review, in an “Ask Me Anything” format. Any yes/no question about the exam format and content goes. If possible, this will be conducted in person, with a simultaneous Zoom meeting for students who may not be able to attend in person due to illness, quarantine, or isolation.

See below for more information on deferring a registrar-scheduled final exam.

**INFO ABOUT TEACHING ASSISTANTS, MEETINGS, AND EMAILS**
Students in POLI 399 have access to two TAs – Zachary Pfeifer and Reed Merrill. Your TAs run each tutorial in person in the Arts computer lab. If you have a question about your tutorial, it is best to start by emailing your TA.

That said, most emails about the course material should be directed to me, rather than to your TAs. I typically respond to e-mails within 24-48 hours on weekdays only, outside of emergencies.
This is to preserve some semblance of work-life balance.

Please try to follow the advice presented here: https://medium.com/@lportwoodstacer/how-to-email-your-professor-without-being-annoying-af-cf64ae0e4087. 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 and TAs.

**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 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.

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.”


**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/.