



PLD

DEPARTMENT OF POLITICAL SCIENCE
FACULTY OF ARTS

POLI 691 – L01
Quantitative Analysis in Political Science
Winter 2018

INSTRUCTOR Melanee Thomas
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OFFICE SS 714
EMAIL thomasm@ucalgary.ca
OFFICE HOURS Wednesday 2-4 pm or by appointment
COURSE DAY/TIME TR 11 am to 1215 pm
COURSE LOCATION ST 147

TUTORIALS T 8 – 930 AM PM (SS 018)
T 1230 – 2 PM (SS 018)
R 5 – 630 PM PM (SS 018)

TEACHING ASSISTANTS Benjamin Adu Gyamfi (benjamin.adugyamfi@ucalgary.ca)
Brett Goodwin (bogoodwi@ucalgary.ca)

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 cross-listed with the undergraduate methods course offered in the department. As graduate students registered in POLI 691, you will attend lectures with POLI 399 students and register in a tutorial led by a teaching assistant (one of your peers). Apart from this, the course 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, regression analysis, content analysis, and case studies;
- Critique the use of common analytical methods in empirical political science;
- Develop a working knowledge of SPSS.

ACCOMMODATIONS

I endeavour to ensure that this course is inclusive of people with a variety of learning styles and abilities. Nonetheless, some students may require additional accommodations.

Students with a documented disability who may require academic accommodation **must** be registered with the Student Accessibility Services (SAS) in order to be eligible for formal academic accommodation (see below). They can be contacted at (403) 220-8237 or access@ucalgary.ca. If you are a student with accommodations granted through SAS, please come discuss your needs with me *as soon as possible* after an Accommodation letter has been issued.

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>).

TEXTBOOKS

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

- Arnold, Robert. 2015. *Intermediate Social Statistics*. Don Mills, ON: 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.

COURSE COMPONENT WEIGHTS AND DUE DATES:

COMPONENT	WEIGHTING	DUE DATES
Tutorial Exercises	15%	Throughout the term, in tutorial
Top Hat/Attendance	15%	Most lectures
Quiz #1	10%	February 6, in class
Quiz #2	10%	March 20, in class
Research Report: Outline	20%	March 9, on D2L
Research Report	30%	April 18, on D2L
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 taken into account 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

Tutorial assignments must be completed during your scheduled tutorial. Late tutorial assignments will **NOT** be accepted. Extensions will not be granted for the Research Report outside exceptional, documented instances of illness or personal/family emergencies. Late research reports 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.**

TAs may not grant extensions. If you require an accommodation, please contact the instructor as early as possible and in person to request an extension. Students are encouraged to speak with the instructor in person 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 SPSS to analyse data. Some tutorial assignments will be completed during tutorial; others will be completed on D2L. Further information about tutorial assignments will be provided in class throughout the term.

QUIZZES

The first quiz will take place on Tuesday, February 6; the second will take place on Tuesday, March 20. Each is worth 10% of your final grade. The quizzes will cover material presented in lectures, readings, and tutorials. No aids, such as textbooks or notes, are permitted during the quizzes. More information about the quiz format will be provided in class.

Note that 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 the instructor 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 forfeits the right to a makeup quiz.

RESEARCH REPORT

A research report documents the results of a research project. Your research project will involve establishing several hypotheses about Canadian political behaviour, based on published research, and testing these hypotheses statistically with 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 March 9, and is worth 20% of your overall course grade. Second, students must complete their full research report. The final report should be no more than 25 pages (double spaced), and is worth 30% of your final grade. Further information about this assignment will be provided in class.

TOP HAT

Please note we will be using Top Hat in POLI 399. This is designed to help me assess how well students are processing information presented in class. As a result, I encourage you to bring your cellular phone, smart phone, laptop computer or tablet to provide feedback during sanctioned times in class. A total of 15% of your final grade will be determined from your participation through the Top Hat system. If you do not possess a cell phone, smart phone, laptop or tablet computer, come see me immediately. Students are responsible for ensuring they are registered on the Top Hat system, and that their responses/presence is properly recorded by the system.

Most of your Top Hat grade will be determined by simply being present (i.e. each question asked in class = 1 point; simply providing an answer = 0.75 point). As a result, Top Hat will be set up to take attendance at the start of each class; in the case of disputes over Top Hat participation, this attendance record will be used as the ultimate course record of attendance.

EMAIL POLICY

Please direct all emails to me, rather than to your TAs. Their time is extremely limited, and the bulk of it will be dedicated to helping you in person in tutorials. My policy is to respond to e-mails within 24-48 hours on weekdays. Students should not expect email responses on weekends, except if emergency. Emails should contain a salutation and a signature. **Questions related to course material should cite the lecture, textbook/reading, and page/slide number(s) reviewed prior to sending an email seeking clarification.** Questions that might be

helpful to others in the class will be added to the course website on D2L.

COURSE SCHEDULE AND REQUIRED READINGS

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

- INTRODUCTION TO CLASS
- **TOPIC 1: The Scientific Method** (estimated January 9)
 - **D2L:** King, Gary, Robert O. Keohane, and Sidney Verba. 1994. "The Science in Social Science." In *Designing Social Inquiry: Scientific Inference in Qualitative Research*. Princeton: Princeton University Press.
 - Picot, Garnett. 2003. "Does Statistical Analysis Matter?" *Horizons* 6 (2003): 6-10. Available at: <http://www.horizons.gc.ca/sites/default/files/Publication-alt-format/2003-0181-eng.pdf>
 - Coursepack: Mayer, Lawrence. 1972. "Values and the Traditionalist Protest." In *Comparative Political Inquiry*.
 - Hancock, Ange-Marie. 2007. "When Multiplication Doesn't Equal Quick Addition: Examining Intersectionality as a Research Paradigm." *Perspectives on Politics* 5(1): 63-79
- **TOPIC 2: Concepts and Theories** (estimated January 11)
 - **D2L.** Roberts, Lance W. Jason Edgerton, Tracey Peter, and Lori Wilkinson. 2015. "Chapter 1" in *Understanding Social Statistics*. Don Mills, ON: Oxford University Press. Pay particular attention to pages 1-12.
- **TOPIC 3: Variables and Hypotheses & Moving from Concepts to Indicators** (estimated January 16)
 - **D2L.** Roberts, Lance W. Jason Edgerton, Tracey Peter, and Lori Wilkinson. 2015. "Chapter 1" in *Understanding Social Statistics*. Don Mills, ON: Oxford University Press. Pay particular attention to pages 14-21.
- **TOPIC 4: Measurement** (estimated January 18)
 - Textbook: Chapter 1
- **TOPIC 5: Validity, and Reliability**
 - Adcock, Robert and David Collier. 2001. "Measurement Validity: A Shared Standard for Qualitative and Quantitative Research." *American Political Science Review* 95(3): 529-546. Available at <http://journals.cambridge.org/action/displayFulltext?type=1&fid=93860&jid=PSR&volumeId=95&issueId=03&aid=93859>
- **TOPIC 6: Causal Thinking, Research Design, and Experiments**
 - King, Keohane, and Verba, Chapter 3
 - **D2L.** Roberts, Lance W. Jason Edgerton, Tracey Peter, and Lori Wilkinson. 2015. "Chapter 1" in *Understanding Social Statistics*. Don Mills, ON: Oxford University Press. Pay particular attention to pages 19-20

- **TOPIC 7: Control Variables**
 - Roberts, Lance W. Jason Edgerton, Tracey Peter, and Lori Wilkinson. 2015. “Chapter 16” in *Understanding Social Statistics*. Don Mills, ON: Oxford University Press. Pay particular attention to page 296.
- **TOPIC 8: Statistics: Describing Variables**
 - Textbook: Chapters 2 and 3
- **TOPIC 9: Statistics: Cross-Tabulations and Statistical Significance**
 - Textbook: Chapter 11 and 7 (read in that order)
- **TOPIC 10: Statistics: Measures of Association**
 - Textbook: Chapter 9 and 10
- **TOPIC 11: Statistics: Examining the Effects of Control Variables**
 - Textbook: Chapter 12.
 - **D2L** Roberts, Lance W. Jason Edgerton, Tracey Peter, and Lori Wilkinson. 2015. “Chapter 16” in *Understanding Social Statistics*. Don Mills, ON: Oxford University Press.
- **TOPIC 12: Statistics: Regression Analysis**
 - Textbook: Chapters 13 and 14
- **TOPIC 13: Statistics: Estimating Sampling Error and Sample Size**
 - Textbook: Chapter 4 and 5
- **TOPIC 14: Designing a Sample**
- **REVIEW**

TUTORIAL SCHEDULE AND REQUIRED READINGS

Each tutorial topic has a corresponding video. You must use the URLs provided on D2L to access each video.

- WEEK 1 (January 22-26): Introduction to SPSS
 - Video (URL on D2L)
- WEEK 2 (Jan 29 – Feb 2): Levels of Measurement
 - Video (URL on D2L)
 - Readings for Lecture Topic 5
- WEEK 3 (Feb 5-9): Working with Variables
 - Video (URL on D2L)
- WEEK 4 (Feb 12-16): Descriptive Statistics
 - Video (URL on D2L)
 - Readings for Lecture Topic 8
- WEEK 5 (Feb 19-23): READING WEEK

- WEEK 6 (Feb 26 – March 2): Statistical Inference
 - Video (URL on D2L)
 - Readings for Lecture Topic 9
- WEEK 8 (March 5-9) Statistics: Nominal-Level Measures of Association
 - Video (URL on D2L)
- WEEK9 (March 12-16): Statistics: Nominal- and Ordinal- Level Measures of Association
 - Video (URL on D2L)
- WEEK 10 (March 19-23): Weighting Cases and Control Variables
 - Video (URL on D2L)
 - Readings for Lecture Topic 7, Topic 11
- WEEK 11 (March 26-30): CONSULTATION ON RESEARCH REPORT
- WEEK 12 (April 2-6): Multiple Regression
 - Video (URL on D2L)

IMPORTANT POLICIES AND INFORMATION

Absence From a Mid-term Examination:

Students who are absent from a scheduled term test or quiz for legitimate reasons (e.g. illness with the appropriate documentation) 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 can then proceed with an academic appeal. The first in an academic appeal is to set up a meeting with the Department Head.

University Regulations:

Students are encouraged to familiarize 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-5.html>. Such offences will be taken seriously and reported immediately, as required by Faculty of Arts policy.

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 will be destroyed after three months; 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 Library Block.

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: ask@gsa.ucalgary.ca

URL: www.ucalgary.ca/gsa

Student Ombudsman

Phone: 403-220-6420

Email: ombuds@ucalgary.ca