

Political Science 201  
Research Methods in Political Science  
Spring Semester 2019  
Lewis & Clark College

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**Professor:** ..... Ian McDonald, Ph.D.  
**Meets:** ..... Monday, Wednesday, and Friday  
..... 12:40pm - 1:40pm  
**Classroom:** ..... JR Howard 115  
**Office:** ..... JR Howard 331  
**Office Hours** ..... Tuesdays and Thursdays 1:00pm - 4:00pm  
..... or other days by appointment  
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**Course Summary**

Why do political scientists call themselves scientists? What can we learn about the world of politics using the tools of scientific inquiry? This course will introduce you to the basic principles of research design, and show you how they are applied to real data by real researchers in the real world to answer really important questions.

We will explore a wide range of methods, including experiments, statistical analysis of large data sets, and qualitative case studies. Your readings combine textbook explanations of these methods with examples of how they are put into practice. You will conduct your own analysis of a question of your choosing in an intensive research project. In order to work with the data, you will learn how to operate an open source data science program, R, that is used by scholars and practitioners in both the social and natural sciences.

The course has two goals. The first is to make you a more sophisticated consumer of social science research. This course will help you understand how good research is constructed and what constitutes a validated causal inference, which will help you in identifying the weakness of claims made every day in your classes, on TV or the Internet, or in discussions with your friends or colleagues.

The second goal is to get you thinking about being a producer of social science research. To that end, the course is organized around designing an original research project, which you can use to better understand a topic that interests you, or as a springboard for a senior thesis. By the end of the semester, you will apply each of the concepts you learn in this course to your own project, and in doing so better understand the trade-offs that go into conducting research.

The course is divided into two sections. The first section introduces the basic elements of research design (theories and hypotheses, theory generation and testing, variables and measurement) and the processes by which scientists choose research questions, generate and then operationalize theories. The second introduces various statistical methods used to test hypotheses. We will discuss how case selection, omitted variables, and the data collection process can limit a study's claims of causal inference.

This course is required for Political Science majors, and fulfills the research methods requirement for the International Affairs major and "Category C" of the College's Quantitative Reasoning requirement.

After completion of this course, successful students will be able to:

- Formulate research questions, theories, and hypotheses
- Choose methodologies appropriate to different research questions.
- Write a literature review.
- Evaluate the soundness of a research design.
- Perform a basic statistical analysis.
- Write code in statistical software (R).
- Execute basic empirical research in the political science discipline.
- Think quantitatively and probabilistically.

### **Course Readings**

The following texts are available for purchase at the College bookstore:

- *The Fundamentals of Political Science Research* [Paperback] by Paul M. Kellstedt and Guy D. Whitten. Third Edition (published in 2018).
- *Quantitative Social Science: An Introduction* by Kosuke Imai. 2017.

- How to Write a Paper for POLS 201 by Ellen Seljan, with some updates and tweaks by me.

All other, non-textbook readings will be posted on Moodle.

## **Policies**

**Involuntary Withdrawal:** Failure to complete class assignments may result in an involuntary withdrawal from the course. Completion of assignments is monitored on an ongoing basis, and a full review of student progress will be available on 3/8/19.

**Support Services:** If you have a disability that may impact your academic performance, you may request accommodations by submitting documentation to the Student Support Services Office in the Albany Quadrangle (x7156). After you have filled out the necessary paperwork for the semester, staff will notify me of the accommodations for which you are eligible.

**Attendance:** Attendance is mandatory and you must stay for the entirety of “lab” and “practice” sessions, even if you complete your assignments early. You are allowed two absences. Each subsequent absence will reduce your Attendance and Participation grade.

**Reading:** Please bring printouts tables and figures of non-textbook readings to class.

**Laptops:** You are encouraged to bring your laptop to class, and at certain sessions, your laptop will be necessary. At the same time, laptops are often less than helpful for note taking, and do not let them become a distraction during our limited lecture time.

If you don’t have access to your own personal computer, see me and we will try to make arrangements with IT.

**Software:** This semester, POLS201 will use R software program and its companion, RStudio. These applications are free of charge and easy to install on any computer. We will review the installation process early in the semester.

## **Grade Components**

You are expected to complete all coursework, and failure to do so may result in an Incomplete. Grades will be distributed as follows:

- Attendance & Participation: 10%

- Midterm: 20%
- Final: 25%
- Assignments: 15%
- Research Paper: 30% [includes building assignments and presentation]

Homework: You are responsible for completing three homework assignments, which will be posted in Moodle. You are expected to complete these assignments independently. Assignment due dates are posted on the course calendar.

Research Paper: By the end of the course you will produce a 20-25 page research paper. The paper will provide a theory of politics and test a hypothesis derived from this theory using the methods taught in this class.

The paper is due the May 3. You will submit components of this paper for review throughout the semester, including:

1. Research Question Proposal
2. Hypothesis Proposal
3. Data Compilation
4. Literature Review Outline
5. Research Design Outline
6. Regression and Robustness Plan

More information on what you are expected to turn in is available in *How to Write a Paper for POLS 201*. Due dates are designated in the course's Moodle calendar. You are expected to schedule an in-person meeting with me to review your progress.

Each component assignment will be graded Pass/Fail. Turning in the assignment is not sufficient for a passing grade. You will occasionally be asked to revise assignments before I determine that it is of sufficient quality. It is important that you make revisions in a timely manner, in particular before the next building assignment is due.

Exams: The exams will test your understanding of the concepts and arguments introduced in the readings and lectures. Ability to complete quizzes and HW assignments will be a good indicator for potential success on the exams.

Quizzes: The class website hosts bi-weekly quizzes. Quizzes count towards your participation grade in this course. The purpose of the quizzes is to help you practice and keep up with the course material. You must complete each quiz in the date intervals listed on the “Quiz” section of the course website (the last possible date is listed on the course calendar). You will not be graded on your answers, only your ability to complete the quiz in the expected time interval.

R is available at <https://www.r-project.org/> and RStudio can be found at <https://www.rstudio.org>. Labs will use the web based <https://rstudio.cloud> application, which can work in any browser.