

**The Science of Politics**  
*PS 2500*

**Purpose:** This course provides an introduction to the Science of Politics. We begin with the Philosophy of Science, focusing on Rene Descarte and David Hume, and how their insights led to the epistemic perspective we now call empiricism. We will see how and why political science is empirical, using evidence to construct and test theories about why societies are so different, varying widely in terms of peace and war, democracy and authoritarianism, prosperity and poverty, as well as elections, voting, campaigns, lobbying, media, protest movements, etc.

The course focuses on real world applications with the goal of using science to empower you in three ways. First, most generally, you will better appreciate that the root of science is skepticism and logic, thereby helping you to make freer choices as well as become a better problem solver. Second, in this course you will become a well-educated consumer of social science, giving you substantial power to understand, evaluate, and utilize scientific knowledge, whether you choose to work in politics, journalism, industry, government, or elsewhere. Third, you leave this class empowered to read—and evaluate *to your own satisfaction*—almost all statistical analyses not only in political science but across most domains of human knowledge. You will gain, I hope, deeper understanding of humanity, ‘seeing’ the powerful yet invisible forces that shape our everyday lives throughout history and across our vast shared planet.

The textbook is entitled the process of social research and through it cover every crucial aspect of contemporary social science: concepts, theory, method, correlation, causation, sample and uncertainty, statistical testing, experiments, surveys, national data, global data, qualitative science, analytic scientific reasoning, and even simply analytic scientific *writing*. This is probably your one and only crash course on the Science of Society so read closely while attempting to think and ponder with as much interest as you can muster. You will learn!

**Required Texts:**

\* *The Process of Social Research, 2<sup>nd</sup> ed.*, Jeffrey C. Dixon, Royce A. Singleton, and Bruce C. Straits. Abbreviated in syllabus as **DSS**. [See next page of syllabus for textbook summary].

\* Electronic readings, posted on Canvas

**Prerequisites:** there are no formal prerequisites for this course.

## The Textbook

*The Process of Social Research*, 2<sup>nd</sup> edition, Jeffrey C. Dixon, Royce A. Singleton, and Bruce C. Straits, Oxford University Press.

The textbook contains all that is necessary to understand and evaluate modern social science. I choose it partially because it nicely covers all of the important elements of social science. More importantly, I choose it because it seemed like the most engaging and entertaining book on methodology that I could find. Although publishers obviously ‘spin’ to their benefit, the following [Oxford University Press summary of the first edition \(2016\)](#) conveys their extraordinary commitment to engaging *you* in important science:

### **Publisher Summary (from first edition, 2016)**

“*The Process of Social Research* successfully meets two major challenges of teaching social science methods: to make the material interesting and accessible to students, and to provide them with the tools necessary to understand, evaluate, and conduct research. Authors Jeffrey C. Dixon, Royce A. Singleton, Jr., and Bruce C. Straits employ a conversational writing style that is engaging and student-friendly. Using everyday examples to introduce chapters and clarify complex concepts, they provide current research examples on such cutting-edge topics as immigration, family composition, prosecutorial misconduct, organized racism, homelessness, social inequality and education, and alcohol consumption and grades. Placing a unique emphasis on the research process, the book helps students understand the logic and mechanics of social research, giving them the tools and the power to evaluate the research of others and to conduct their own research. Beginning with the introduction, every chapter contains flowcharts of research processes. As each diagram is presented, the authors relate the specific method to the overall research process. Then, over the course of the chapter or section, they flesh out each step. This way, they convey information about the "nuts and bolts" of research while ensuring that students do not lose sight of the logic of inquiry.

### **Grading:**

Exams: 40%	<i>Midterm = 20%</i>	<b>DATE</b>
	<i>Final = 20%</i>	<b>DATE</b>
Quizzes: 15%		(daily)
Participation: 15%		(daily)
Analyses: 15%		(weekly by start of class on Tuesdays)
Homework: 15%		(weekly by start of class on Tuesdays)

We will release specific instructions for all assignments and homework on Canvas. One reoccurring theme is that you will frequently locate and reading peer-reviewed political science articles and then writing brief reports on their contents. The point is to use your newly acquired scientific skills to understand technical political science articles, and to then demonstrate your understanding in clear prose. Through practice, you will develop useful scientific skills while achieving deep knowledge of topics that you find particularly interesting.

**Exam Date and Make-Ups:**

No exam make-ups will be given without a university-approved excuse for missing the scheduled exam. In cases of illness I require a doctor's note, that is signed and on the doctor's letterhead, explaining why you were too sick to take the exam. In cases of death or severe illness of a family member I require proof (e.g., obituary). I will, if necessary, make phone calls to doctors, parents, or whomever to verify the excuse. Given that you know the exam dates so far ahead of time, I usually do not make allowances for airplane flights, job interviews, etc. If you are eligible to receive a make-up you must contact me as soon as possible.

**Academic Dishonesty:**

Academic integrity is fundamental to the activities and principles of a university. All members of the academic community must be confident that each person's work has been responsibly and honorably acquired, developed, and presented. Any effort to gain an advantage not given to all students is dishonest whether or not the effort is successful. The academic community regards breaches of the academic integrity rules as extremely serious matters. Sanctions for such a breach may include academic sanctions from the instructor, including failing the course for any violation, to disciplinary sanctions ranging from probation to expulsion. When in doubt about plagiarism, paraphrasing, quoting, collaboration, or any other form of cheating, consult me.

**Students with Disabilities:**

Please let me know as soon as possible if:

- You anticipate barriers related to the format or requirements of this course.
- You have emergency medical information to share with me.
- You need to make arrangements in case the building must be evacuated.

If you require disability-related accommodations (such as a notetaker, extended time on exams or captioning), please establish an Accommodation Plan with the Disability Center:

- [disabilitycenter.missouri.edu](http://disabilitycenter.missouri.edu); S5 Memorial Union; 573-882-4296

After you have registered, please notify me of your eligibility for reasonable accommodations.

For other MU resources for students with disabilities, click on "Disability Resources" on the MU homepage.

## Course Outline

### Week 1 - Introduction

1/21 - Course Introduction

1/23 - Scientific Skepticism

### Week 2 – Philosophy of Science

1/28 Empiricism

1/30 Rationalism

### Week 3 – Scientific Method

2/4 - Scientific Method – Philosophy of Science

2/6 - Scientific Method – Contemporary Understandings

### Week 4 – Theory

DSS Chapters 1 and 2

2/11 Concepts

2/13 Theory

### Week 5 – Research Design

2/18 DSS Chapters 3 and 4

2/20

### Week 6 – Measurement

DSS Chapter 5

2/25

2/27

### Week 7 – Mid Term Exam

3/3 - Review Session

3/5 - Midterm Exam

### Week 8 – Sampling and uncertainty

3/10

3/12

## DSS Chapter 6

### Week 9 –

3/17

3/19

DSS Chapter 12

### Week 10 Reading and Writing

3/24

3/26

- DSS Chapter 14

### Week 11 - Experiments

4/7

4/9

- DSS Chapter 7

### Week 12 – Surveys

4/14

4/16

- DSS Chapter 8

### Week 13 – Existing Data

4/21

4/23

### Week 14 - Qualitative analysis

4/28

DSS Chapters 9, 11, and 12 (partial)

4/30

- “The Critical Analysis of Historical Texts” (2006), Marc Trachtenberg, *The Craft of International History*, pp. 51-78.
- “Sherlock Holmes and the Adventure of Silver Blaze” (1892), Arthur Conan Doyle, *The Strand Magazine*.
- “Understanding Process Tracing” (2011), David Collier, *Political Science and Politics* 44/2: 823-830.

### Week 15 – Pseudo-Science

The Demarcation Problem

5/5

## 5/7 - How to Distinguish Science from Pseudo-Science

For your final grade, the minimum percentage required for each grade is indicated in the following table.

<b>Letter</b>	<b>%</b>	<b>Letter</b>	<b>%</b>	<b>Letter</b>	<b>%</b>	<b>Letter</b>	<b>%</b>
A+	97%	B+	87%	C+	77%	D+	67%
A	93%	B	83%	C	73%	D	63%
A-	90%	B-	80%	C-	70%	D-	60%
						F	< 60%

If you have any questions about this grading policy at any point in the semester, please feel free to ask me.