GOVT 83.21 / QSS 30.03
Experiments in Politics

Instructor: Prof. Brendan Nyhan
Office: Silsby 120
Email: nyhan@dartmouth.edu
Phone: 603/646-2894

Classroom: Silsby 213
Schedule: TTH 2:25–4:15 PM
x-period: Wed. 4:35 PM–5:25 PM
Office hours: Wed. 9–11 AM

Course overview

This class is a lab-style seminar in which we will design, field, and analyze an experimental study of political misperceptions. Every aspect of the class will require your active involvement. Working together, we will help you build deep knowledge of a rapidly developing area of scientific research; learn how to employ survey and experimental methods to design a novel study of this topic; and then analyze, present, and critique our findings in the rigorous format of technical academic writing. Our ultimate goal is to jointly publish a scholarly article in a peer-reviewed journal of political science—an ambitious project that will require a substantial commitment from each student. Flexibility will also be essential since the course will evolve during the quarter based on the needs of the project. In particular, I ask that you keep the x-period open so we can use it for ad hoc meetings. I have scheduled meetings for the x-period on April 12 and May 3 but we may need to meet at that time during other weeks.

Prerequisites

The course has no prerequisites, but GOVT 10 or an equivalent course is strongly recommended. We will frequently use Stata and analyze data using statistics. (You may also use R if you prefer.)

Plan for the course

We will begin by discussing the goals of science and the value of experiments. We will then learn about experimental design, statistics, and the use of statistical software. To make these concepts more real, students will design, administer, and analyze their own mini-experiments in small groups. Students will also take part in real surveys and experiments as workers on Amazon Mechanical Turk or as panel members for YouGov, SSI, or another survey firm.

In the second phase of the course, we will determine the focus of our research. With my guidance, students will survey recent articles in political science and psychology, identify a promising theory or unresolved question related to misperceptions, and write a short paper proposing an experiment that we could carry out. After these proposals have been presented, the class will decide which questions to pursue. Typically, we select two designs for pre-testing, evaluate the results of the pre-tests, and then refine the preferred design for the final study.

In both the pre-test and final study design phases, we will break into groups to design different portions of the experiment, which will be revised and combined. After finalizing the design and obtaining human subjects approval to conduct the study, we will collect experimental data from online participants on Amazon's Mechanical Turk or an equivalent service.

During the last part of the class, we will work together to analyze the data and report our findings. Each student will write a short paper adhering to the formatting and word limits of a "Flash Report" in the *Journal of Experimental Social Psychology* (2500 words). I will combine those drafts into a class manuscript that we will revise collaboratively. The class will culminate with each student developing a critique of the paper's writing, argument, and quantitative analysis and proposing revisions and/or additional experiments designed to improve it. These changes will hopefully be integrated into a manuscript that will be submitted to a scholarly journal after the completion of the course. (The outcome will depend on the results of our initial experiment.) Participation in revisions after the class ends is totally optional.

Learning objectives

By the end of the course, you will be able to:

- Explain the value of experiments to science

- Critique previous experimental research in political science and psychology

- Design and conduct an original experiment

- Perform a statistical analysis of experimental data

- Write and critique a scholarly article reporting the results of an experiment

Because these tasks may be unfamiliar, submissions from past classes are provided as a reference for each major assignment on Canvas.

Course materials

The following book is required and can be purchased or rented online:

- Dana S. Dunn. *Research Methods for Social Psychology*, 2nd Edition.

A few chapters from other books will be made available as scanned PDFs on Canvas under Course Materials and are labeled as such below. All other assigned readings can be accessed by clicking on the hyperlink in the article title below. (Note: You will need to be on the campus network or logged into the VPN to access those that are behind academic journal paywalls.)

Communication

The class will run through Canvas. I will use it to email announcements to you and to provide PDFs of assigned readings that are not available online. Please submit your work to me through its assignments function rather than by email. However, if you have questions, please come to my office hours or email me.

Laptop/electronic device policy

Laptops, cell phones, and other devices may only be used during class with permission during working sessions, group work, etc. unless you need a disability-related accommodation. You should therefore print all readings before class. This policy is motivated by the growing body of research which finds that laptops hinders learning not just for people who use them but those around them as well. Multitasking is distracting and cognitively taxing. In addition, research suggests that students take notes more effectively in longhand than on laptops.

Academic integrity

Students are responsible for understanding and following Dartmouth's academic integrity rules: https://students.dartmouth.edu/judicial-affairs/policy/academic-honor-principle. Ignorance of the Academic Honor Principle will not be considered an excuse if a violation occurs. Beyond any penalties imposed as a consequence of an Academic Honor Principle investigation, any student who is found to have cheated or plagiarized on any assignment will receive a failing grade. Details on appropriate uses of sources and citation are available at http://writing-speech.dartmouth.edu/learning/materials/sources-and-citations-dartmouth. In general, you should *always* err on the side of caution in *completely* avoiding the use of language from authors you have read or from your classmates absent proper attribution. Following Dartmouth's academic integrity policies strictly is of course always mandatory but it is especially essential in this seminar because we hope to publish our research in a peer-reviewed journal. (Any infractions could harm the entire class.) Please see me immediately if you have any questions or need further clarification.

Students with disabilities

Students with disabilities who may need disability-related academic adjustments and services for this course are encouraged to see me privately as early in the term as possible. Students requiring disability-related academic adjustments and services must consult the Student Accessibility Services office (205 Collis Student Center, 646-9900, Student.Accessibility.Services@Dartmouth.edu). Once SAS has authorized services, students must show the originally signed SAS Services and Consent Form and/or a letter on SAS letterhead to me. As a first step, if you have questions about whether you qualify to receive academic

adjustments and services, you should contact the SAS office. All inquiries and discussions will remain confidential.

Religious observances

Some students may wish to take part in religious observances that occur during this academic term. If you have a religious observance that conflicts with your participation in the course, please meet with me before the end of the second week of the term to discuss appropriate accommodations.

Statistical software/consulting

We will use Stata statistical software in this course, which is freely available to students. Please install Stata 13 and the Kay Access app on your computer and verify that you can run it successfully as soon as possible.

Installing Stata 13 for Mac (make sure you install KeyAccess first!):
http://tech.dartmouth.edu/its/services-support/help-yourself/knowledge-base/stata-macintosh-os-x

Installing Stata 13 for Windows (make sure you install KeyAccess first!):
http://tech.dartmouth.edu/its/services-support/help-yourself/knowledge-base/stata-windows

Please note that some people have had trouble installing Stata in the past, so please make sure to do it as soon as you can so you can get help before the first Stata workshop if you run into problems. Also, you must be connected to the Dartmouth network via Ethernet, wireless, or the VPN to install and use Stata and KeyAccess. If you are off campus, you will first need to sign on to the VPN at http://gateway.dartmouth.edu.

If you have trouble getting Stata installed, please visit the IT Walk-in Center at 178J Berry Library. You should have Stata installed on your computer and ready to use. Please bring your computer to class.

To learn how to correctly set your working directory and open data in Stata, please consult the guide provided at the end of this syllabus. If you have additional problems, please consult the following resources in this order:

1. Stata help — Simply type "help <command>" for any Stata command in the command window and the help file for that command will appear. For more help, click on the linked title of the help file (e.g., "[R] summarize") to open a PDF of the relevant section of the Stata manual. The manual provides more extensive discussion and examples in the "Remarks" section, which appears below the text from the online help file.

2. Consult the Dartmouth Stata research guide at http://researchguides.dartmouth.edu/statapp_koujue and the Dartmouth Stata FAQ at http:

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//www.dartmouth.edu/comp/soft-comp/software/statistics/statafaq.html.

3. Consult the sample .do file that I have provided on Canvas, which demonstrates a variety of useful commands with correct syntax, including how to tabulate, summarize, and graph data and perform various statistical tests and analyses.

4. Google for answers — extensive resources are now available online. Someone has probably asked the same question in the past. UCLA's Stata resources site (http://www.ats.ucla.edu/stat/stata/) is especially helpful. See also the Stata YouTube channel for demonstration videos.

5. James L. Adams, our Data and Visualization Librarian, can provide help with questions about Stata syntax or data/visualization. Please contact him at James.L.Adams@dartmouth.edu. You may also consult Jianjun Hua, a statistical consultant providing support for students in this course, with any statistics-related questions that are not Stata-specific. He can provide assistance to you during his office hours in 010 Silsby (Mondays 2–4 PM from April 10 to May 29) or by appointment in his office (Room 421 at 37 Dewey Field Road). Please email him at jianjun.hua@dartmouth.edu with a brief description of your question(s) and the exact stop-by time in advance if you plan to stop by during his office hours.

6. Contact me by email at nyhan@dartmouth.edu or make an appointment to meet with me. When you do, please send a precise description of your problem along with your data, .do file, and a screenshot or Stata output, which help me more quickly diagnose the problem.

(Students who want a more detailed guide to Stata usage might wish to consult *A Stata Companion to Political Analysis, Third Edition* by Philip H. Pollock III or *A Gentle Introduction to Stata, Fourth Edition* by Alan C. Acock.)

Office hours

My office hours for the spring term are Wednesday from 9:00–11:00 AM. To ensure you have a time that works for you, please schedule a meeting with me using my ScheduleOnce page at http://meetme.so/BrendanNyhan. I will prioritize appointments over walk-ins though I am of course happy to meet with any student if time permits. (If you cannot make it to office hours, please email me to schedule an alternate meeting time.)

Assignments and grading

Grading in this class will be based on the components described below. All work is due at the time specified in the syllabus and on Canvas unless otherwise noted. Late work will not be accepted without prior permission.

Class participation—20%

By necessity, our collaboration will largely take place in the classroom. As such, it is essential that each student make thoughtful and consistent contributions in class discussion and group work. At a minimum, however, you should attend class on time with your readings and assignments completed and be respectful of others during class discussion.

Please also note that we will often write or edit documents, analyze data, etc. during the seminar. It is thus essential for you to bring your laptop to class so that you can participate in these activities.

One-page assignments and out-of-class participation—10%

It is also important that each student make contributions to our collective effort outside of class time. During the quarter, students will be regularly asked to contribute to the design of our experiment via email, on Google Docs, etc. and to complete a series of one-page assignments asking them to propose experiments, critique proposed experiments, and suggest revisions that could improve them. In each case, the goal is to help teach you how to think analytically about answering social scientific questions using experiments. Your contributions will be evaluated based on creativity, insight, and attention to detail.

Proposed experiment (due 4/11 10 PM; draft due 4/9 10 PM)—15%

Each of you will work with me to select a research topic from the list at the end of the syllabus or to choose a related topic (which I must approve). You will then write a 1000–1500 word paper summarizing recent research in that area and proposing a realistic experiment related to misperceptions which would make an important contribution to that literature. (Note: Before starting the assignment, read the required overview articles on correcting misperceptions listed at the end of the syllabus as well as Ch. 2 and Appendix B in Dunn.)

Here are the three primary goals of this assignment, which correspond roughly to the structure I envision (though the organization of the paper is up to you):

1. Give a short but precise summary of the most important (i.e. new/prestigious or influential/highly cited) articles in your field so that your fellow students can discuss your area intelligently. You can't possibly cover all of the research, so you should make sure to focus on the key aspects of the most important and novel studies (research questions, methodologies, findings, etc.). The idea is to give us an overview of the most relevant work (i.e., the foundational research and the most recent/relevant studies) and to build from there.

2. Make an argument for where the literature described in #1 has fallen short or where unanswered questions remain. This can be a separate section or woven into your literature review.

3. Propose an experiment that builds on the state of the art described in #2. Your description of the experiment needs to provide enough detail so that we can have an intelligent discussion about it. At a minimum, it should include the research question/hypothesis, the experimental design (e.g., 2x2 between-subjects), the proposed experimental treatments, the dependent variable(s), any non-experimental variables should be measured because they might change the effect of the treatment, and any steps that should be taken to minimize extraneous/confounding variables.

Since this will be a new type of assignment for most of you, I will review draft papers and provide feedback if you submit a draft by the early deadline above (this is optional). I will also make sample proposals from previous students available on Canvas.

Flash report (due 5/19 at 5 PM; drafts due 5/14 at 10 PM)—30%

Each student will write a short paper reporting the results of the experiment that adheres to the formatting and word limits of a "Flash Report" in the *Journal of Experimental Social Psychology* (2500 words – see JESP's Guide for Authors and Editorial Guidelines). You will have a chance to get feedback from your classmates on a draft of your article before it is due. Examples of paper sections written by previous students will be available on Canvas. The rubric that I will use to evaluate your work is provided at the end of the syllabus.

Proposed revisions/critiques of article—25%

I will combine the drafts into a single class manuscript. Each student will then develop a 500–750 word paper critiquing a *specific* aspect of its writing, argument, and/or quantitative analysis and proposing revisions or future experiments to address the problems they have identified (5%, due 5/26 at 5 PM). You will get feedback from your classmates on a draft (due 5/24 at 10 PM) before submitting a final version. The goal is to give you experience with the critique and revision process.

Students will then write a 1500–2500 word critique of the article as a whole for their final paper. It make a coherent argument that proposes further revisions and/or suggests future research projects that build on our results (20%, due 6/4 at 10 PM). Avoid listing a series of disconnected points in little depth! As in the cases above, I will provide sample papers from previous students on Canvas for you to review. Please submit a short summary or proposal for your long critique before our final class (due 5/28 at 10 PM).

The rubric that I will use to evaluate your critiques is provided at the end of the syllabus.

Course schedule

Experiments: Why and how

Why experiments? Plan for the class (3/28)

- Why experiments? (real world)

    - Sasha Issenberg. "Nudge the Vote." *New York Times Magazine.* October 29, 2010.
    - Issenberg. "The Death of the Hunch." *Slate*, May 22, 2012.

- Why experiments? (academic)

    - Alan S. Gerber and Donald P. Green (2012). *Field Experiments: Design, Analysis, and Interpretation.* Pages 1–8 (Canvas).
    - James N. Druckman, Donald P. Green, James H. Kuklinski and Arthur Lupia (2011). "Experiments: An Introduction to Core Concepts." In Druckman, Green, Kuklinski, and Lupia (eds.), *Cambridge Handbook of Experimental Political Science* (Canvas).
    - Rachel Glennerster and Kudzai Takavarasha (2013). *Running Randomized Evaluations: A Practical Guide.* Excerpts from Chapter 2 (Canvas).
    - Joshua D. Angrist and Jörn-Steffen Pischke, *Mastering 'Metrics: The Path from Cause to Effect*, 1–12 (Canvas).

- Why misperceptions? (my expertise)

    - The Nature and Origins of Misperceptions: Understanding False and Unsupported Beliefs about Politics

- Our plan of attack: Replicate and extend

    - Gary King. 2006. "Publication, publication." *PS: Political Science and Politics.* 119–121 (stop where it says "Ground Rules").

Experimental and survey design fundamentals (3/30)

- Annabel Ness Evans and Bryan J. Rooney (2011). *Methods in Psychological Research*, Second Edition: Chapters 4 and 7 (Canvas).

- Dunn, Chapter 4 (Canvas)

- Assignment: Earn $4 as a worker taking academic studies on Amazon Mechanical Turk and write a one-page reflection paper on what you learned about surveys, identifying both practices that should be emulated and those that should be avoided (due 4/2 10 PM; include screenshot showing payments)[1]

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[1]Alternative arrangements can be made if you are not eligible to work on Mechanical Turk (contact me for further details).

- Assignment: Read about potential research topics and submit topic rankings (due 4/2 10 PM)

Experiments: Applied design workshop (4/4)

- Measurement: Dunn, Chapters 6–9

- Design and analysis critique

    - Sample article 1: Anthony Bastardi, Eric Luis Uhlmann, and Lee Ross (2011). "Wishful Thinking: Belief, Desire, and the Motivated Evaluation of Scientific Evidence." *Psychological Science* 22(6): 731–732.

    - Sample article 2: David Gal and Derek D. Rucker (2010). "When in Doubt, Shout! Paradoxical Influences of Doubt on Proselytizing." *Psychological Science* 21(11): 1701–1707.

    - Assignment: 3–5 questions about the experimental designs in the sample articles, the inferences the authors draw, or the statistical analyses they conducted (due 4/4 12 PM). Read them closely! We will work through them in detail during class.

- Small group: Design your own mini-experiment

Student session (4/6)

- Complete experimental design — your final design (due 4/7 by 5 PM) should include the following:

    - Conceptual, research, and statistical hypotheses

    - Independent variable (i.e., treatment/control), dependent variable (outcome variable or variables), and brief rationale for how they are operationalized

    - Summary of the experimental design (i.e., 2x2 between-subjects)

    - Non-experimental demographic variables you think are necessary to measure so you can describe the composition of your sample (measure them pre-treatment!)

    - Non-experimental variables that you plan to measure because they might change the effect of your treatment (measure them pre-treatment!)

    - Steps taken to minimize extraneous/confounding variables

    - Include your draft instrument from Qualtrics (Advanced options→Export survey to Word or copy/paste from the Print Survey screen; make sure to precisely identify what content is being randomized and which group sees what)[2]

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[2]See the notes on how to use Qualtrics and analyze data from it at the end of the syllabus.

- Collect mini-experiment data (must be ready for analysis in class on 4/11)

Statistical evaluation of experiments (4/11)

- Evans and Rooney, pp. 269–288 (Canvas)

- William D. Berry and Mitchell S. Sanders (2000), *Understanding Multivariate Research*, pp. 1–39, 45–49 (Canvas)

- Rachel Glennerster and Kudzai Takavarasha (2013). *Running Randomized Evaluations: A Practical Guide.* Excerpts from Chapter 8 (Canvas).

- Optional statistics resources:

    – Relevant GOVT 10 lecture slides (Canvas)
    – The *OpenIntro Statistics* textbook (free!)
    – Hints on how to read and interpret regression tables (handout on Canvas)
    – The Statistical Reasoning online tutorial provided by the Open Learning Initiative at Carnegie Mellon

- Optional Stata resources:

    – *Getting Started With Stata*, Ch. 3 (Canvas)
    – Khan Academy probability and statistics videos
    – Stata YouTube demonstration videos
    – Sample Stata .do file with example syntax and explanatory comments (Canvas)

- Discussion: How could measurement and manipulations of mini-experiment have been improved?

- Small groups: Mini-experiment data analysis workshop (create commented mini-experiment do-file, data, and cleanly formatted results summary and submit by end of class)

Choosing a topic

Research topics (4/12–**x-period**)

- Assignment: Submit your experimental proposal (due 4/11 10 PM)

- Read other students' experimental proposals (Canvas)

- Assignment: Drawing on the criteria listed below, propose at least one modification to/critique of each experiment we will discuss other than your own (up to 2 pages; can be in list/bullet format — due 4/12 at 3 PM)

- Small groups: Discuss ideas for experimental modifications

Research topics II (4/13)

- Read other students' experimental proposals (Canvas)

- Assignment: Propose at least one modification to/critique of each experiment we will discuss other than your own (up to 2 pages; can be in list/bullet format — due 4/13 at 12 PM)

- Discussion: Consider all the possible approaches. Which is the best topic **other than your own** according to the following criteria?

  - Normative importance (does it deal with an important question for democracy?)

  - Theoretical contribution (new hypothesis/prediction—the more original or surprising, the better)

  - Methodological contribution (new technique used)

  - Empirical contribution (surprising or counter-intuitive result, contradicts previous findings, etc.)

  - Practical considerations (can we do it?)

- Goal: Choose research topic and basic research design

Pre-test design and analysis

Study design I (4/18)

- Read relevant articles on your pre-test study topic:

  - (Readings on pre-test study topics: TBD)

- Readings on Mechanical Turk:

  - Adam J. Berinsky, Gregory A. Huber, and Gabriel S. Lenz (2012). "Evaluating Online Labor Markets for Experimental Research: Amazon.com's Mechanical Turk." *Political Analysis* 20(3): 351–368.

  - Connor Huff and Dustin Tingley (2015). "Who are these people? Evaluating the demographic characteristics and political preferences of MTurk survey respondents." *Research & Politics*.

- Resources on previous poll questions and misperceptions (optional; for background/reference)

- The Nature and Origins of Misperceptions: Understanding False and Unsupported Beliefs about Politics
- Misinformation and Fact-checking: Research Findings from Social Science
- American National Election Studies Time Series Cumulative Data File (variable list)
- Previous academic studies in Google Scholar
- Roper Center for Public Opinion Research: iPoll
- PollingReport.com

- Assignment: Propose design of an experiment and outline of independent and dependent variables in instrument (can be in list/bullet format but make it as detailed as possible; due 4/18 12 PM)

- Goal: Create preliminary experimental design(s)

Study design II (4/19)

- Assignment: Complete experimental instrument draft(s) in Google Docs

Study design III (4/20)

- Assignment: Read Dunn Chapter 3 and complete CPHS human subjects training

- Goal: Finalize experiment and implement in Qualtrics (during class; see notes at end of syllabus)

- Goal: Complete and submit exemption application (during class)

Pre-test results (4/25)

- Assignment: What hypotheses should we test and descriptive statistics/plots should we generate with the pre-test data? (one page in list or bullet form; due 4/25 12 PM)

- Small group assignment: Commented do-file that makes dependent and independent variables and tests hypotheses plus one-page summary of results (due at end of class)

- Goal: Review/understand pre-test results

Experimental revisions (4/27)

- Individual assignment: Proposed revisions to experiment (1 page; due 4/27 12 PM)

- Discuss experimental revisions based on pre-test results

Writing the article

Study preregistration (5/2)

- (Readings on final study topic: TBD)

- Edward Miguel et al. (2014). "Promoting Transparency in Social Science Research." *Science* 343(6166): 30–31.

- Assignment: Draft preregistration following EGAP format (template on Canvas; include suggestions for changes to study design/instrument) and submit a Word doc or PDF on Canvas (due 5/2 12 PM; submit on Canvas, not to EGAP)

- Goal: Identify hypotheses and define analysis plan as a group

Components and structure of an article (5/3–**x-period**)

- Dunn Ch. 12, Appendix C

- Gary King (2006). "Publication, publication." *PS: Political Science and Politics.* 121–125 (start at the section on style).

- Brendan Nyhan, Jason Reifler, and Peter Ubel (2013). "The Hazards of Correcting Myths about Health Care Reform." *Medical Care* 51(2): 127–132. (Canvas)

- Assignment: One-page reaction paper to Nyhan, Reifler, and Ubel — may include comparison/contrast to recommendations in Dunn or King, suggestions for improvements, questions to discuss in class, or reflections on the differences from other types of academic writing (due 5/3 3 PM)

Best practices in scientific writing (5/4)

- Robert Neugeboren with Mireille Jacobson (2005). "Writing Economics: A Guide for Harvard's Sophomore Economics Concentrators." Pages 21–25 only (others optional).

- Shiri Lev-Ari and Boaz Keysar (2010). "Why don't we believe non-native speakers? The influence of accent on credibility." *Journal of Experimental Social Psychology* 46(6): 1093–1096.

- David K. Sherman, Cynthia Gangi, and Marina L. White (2010). "Embodied cognition and health persuasion: Facilitating intention-behavior consistency via motor manipulations." *Journal of Experimental Social Psychology* 46(2): 461–464.

- Assignment (2–3 pages): Compare/contrast the two articles above, identifying best practices in academic writing as well as problems to be avoided (due 5/4 12 PM)

- Small groups: Compare articles to draft preregistration, identify omissions and flaws to correct before finalizing

Results analysis

Initial analysis of results (5/9)

- Small group work in Stata with study data

- Small group assignment: Commented do-file of descriptive statistics, statistical results, and graphs

Further analysis of results (5/11)

- Small group work in Stata with study data

- Small group assignment: Commented do-file of descriptive statistics, statistical results, and graphs (due end of class)

Peer feedback on article drafts (5/16)

- Assignment: Article draft (due 5/14 10 PM)

- Assignment: For each section of your partner's draft, list at least two specific aspects of the manuscript that meet the objectives described in the flash report rubric at the end of the syllabus and at least two that need further development. With those criteria in mind, write at least three specific and constructive questions for the author that could help them think about how best to revise the paper (due 5/16 12 PM).

- Class discussion of paper progress

- Review and discussion of peer review responses

Revisions (5/18)

- Working session

- Assignment: Article final (due 5/19 5 PM)

Revising the article

Article discussion (5/23)

- Carefully read draft manuscript

- Small groups: Clean up errors and omissions

- Assignment: Ideas for short and long critiques (1 page; due 5/23 12 PM)

Short critiques (5/25)

- Assignment: Short critique draft (due 5/24 10 PM)

- Read other students' draft short critiques

- Assignment: Draft short critique responses (1 paragraph each; due 5/25 12 PM)

- Small groups: Feedback on critiques

- Assignment: Short critique final (due 5/26 5 PM)

Long critiques (5/30)

- Assignment: Long critique proposals (due 5/28 10 PM)

- Read other students' long critique proposals

- Assignment: Responses to other students' long critique proposals (1 paragraph each; due 5/30 12 PM)

- Small groups: Feedback on proposals

- Assignment: Long critique final (due 6/4 10 PM)

Paper topics

To find a topic, please first consult the syllabus for my misinformation course (http://www.dartmouth.edu/~nyhan/misinformation-syllabus.pdf) and these overview articles:

When Corrections Fail: The Persistence of Political Misperceptions
The Nature and Origins of Misperceptions: Understanding False and Unsupported Beliefs about Politics
Misinformation and Fact-checking: Research Findings from Social Science
Misinformation and Its Correction: Continued Influence and Successful Debiasing
The Politically Motivated Reasoning Paradigm

An alternate list of possible topics and relevant articles is provided below (note: please talk to me if you would like to design a custom topic instead). Each article can be accessed by clicking on the hyperlink in the article title. Make sure to read Ch. 2 and Appendix B of Dunn before starting your paper.

Political science research on misinformation and corrections

Misinformation and the Currency of Democratic Citizenship
Same Facts, Different Interpretations: Partisan Motivation and Opinion on Iraq
The Elusive Backfire Effect: Mass Attitudes' Steadfast Factual Adherence
Rumors and Health Care Reform: Experiments in Political Misinformation
The Hazards of Correcting Myths About Health Care Reform
Which Corrections Work? Research results and practice recommendations
Processing political misinformation: comprehending the Trump phenomenon
Displacing Misinformation about Events: An Experimental Test of Causal Corrections
Emotions, Partisanship, and Misperceptions: How Anger and Anxiety Moderate the Effect of Partisan Bias on Susceptibility to Political Misinformation
The roles of information deficits and identity threat in the prevalence of misperceptions

The effects of fact-checking

Liar, Liar, Pants on Fire: How Fact-Checking Influences Citizens Reactions to Negative Advertising
Debating the Truth: The Impact of Fact-Checking During Electoral Debates
Do People Actually Learn From Fact-Checking? Evidence from a longitudinal study during the 2014 campaign

Correcting Political and Consumer Misperceptions The Effectiveness and Effects of Rating Scale Versus Contextual Correction Formats

Motivated reasoning about science, health, and data

Motivated Numeracy and Enlightened Self-Government
Does Biology Justify Ideology? The Politics of Genetic Attribution
Featuring Skeptics in News Media Stories About Global Warming Reduces Public Beliefs in the Seriousness of Global Warming.
Building Public Support for Science Spending
Communicating Science Effectively: A Research Agenda
The polarizing impact of science literacy and numeracy on perceived climate change risks
Motivated Rejection of Science
How People Update Beliefs about Climate Change: Good News and Bad News

Psychological resistance to unwelcome information

Solution aversion: On the relation between ideology and motivated disbelief
The psychological advantage of unfalsifiability: The appeal of untestable religious and political ideologies
The heart trumps the head: Desirability bias in political belief revision
Inoculating the Public against Misinformation about Climate Change

Fake news

Social Media and Fake News in the 2016 Election

Rumors: Communications and psychology research

Rumor denials as persuasive messages: Effects of personal relevance, source, and message characteristics
Source characteristics in denying rumors of organizational closure: Honesty is the best policy
Rumor Has It: The Moderating Effect of Identification on Rumor Impact and the Effectiveness of Rumor Refutation
Tweet, but Verify: Epistemic Study of Information Verification on Twitter
Electoral Consequences of Political Rumors: Motivated Reasoning, Candidate Rumors, and Vote Choice during the 2008 U.S. Presidential Election
Troubling Consequences of Online Political Rumoring

Memory and misinformation

Correcting false information in memory: Manipulating the strength of misinformation encoding and its retraction

Mortality salience

Self-affirmation and ego depletion

Information selection and processing

"Cultural cognition"

The Tragedy of the Risk-Perception Commons: Culture Conflict, Rationality Conflict, and Climate Change
Cultural Cognition of Scientific Consensus

Conspiracy theories

The Truth Is Out There: Belief in Conspiracy Theories
Lacking control increases illusory pattern perception
An Existential Function of Enemyship: Evidence That People Attribute Influence to Personal and Political Enemies to Compensate for Threats to Control
Conspiracy Endorsement as Motivated Reasoning: The Moderating Roles of Political Knowledge and Trust
What Drives Conspiratorial Beliefs? The Role of Informational Cues and Predispositions
Is Belief in Conspiracy Theories Pathological? A Survey Experiment on the Cognitive Roots of Extreme Suspicion
A Dual-Motive Model of Scapegoating: Displacing Blame to Reduce Guilt or Increase Control
The Kennedy Assassination, Unidentified Flying Objects, and Other Conspiracies: Psychological and Organizational Factors in the Perception of "Cover-up"
Conspiracy Theories are for Losers
Conspiracy Theories, Magical Thinking, and the Paranoid Style(s) of Mass Opinion
Do I think BLS data are BS? The Consequences of Conspiracy Theories
A major event has a major cause: Evidence for the role of heuristics in reasoning about conspiracy theories (Canvas)
Measuring belief in conspiracy theories: the generic conspiracist beliefs scale
Public Opinion on Conspiracy Theories
Conspiracy Endorsement as Motivated Reasoning: The Moderating Roles of Political Knowledge and Trust
The Social Determinants of Conspiratorial Ideation
http://onlinelibrary.wiley.com/doi/10.1111/pops.12404/full
Classified or Coverup? The Effect of Redactions on Conspiracy Theory Beliefs
An inflated view of the facts? How preferences and predispositions shape conspiracy beliefs about the Deflategate scandal

Social category differences and misinformation belief

Smearing the opposition: Implicit and explicit stigmatization of the 2008 US Presidential candidates and the current US President
Is Obama the Anti-Christ? Racial priming, extreme criticisms of Barack Obama, and attitudes toward the 2008 US presidential candidates

Negation and corrections

Ambivalence and attitude certainty

"Matching," affect, and persuasion

Majority/minority dynamics and social context effects in persuasion

Source effects and elite configurations

Belief perseverance and the continued influence effect

The illusion of truth effect

Distortions in social dissemination of information

Political rumoring on Twitter during the 2012 U.S. Presidential election: Rumor diffusion and correction

Emotional responses to political information

Civic Engagements: Resolute Partisanship or Reflective Deliberation
The Affective Tipping Point: Do Motivated Reasoners Ever "Get It"?
How I Vote Depends on How I Feel: The Differential Impact of Anger and Fear on Political Information Processing
Mad enough to see the other side: Anger and the search for disconfirming information

Resistance to scientific evidence

Biased Assimilation, Attitude Polarization, and Affect in Reactions to Stereotype-Relevant Scientific Information
The Scientific Impotence Excuse: Discounting Belief-Threatening Scientific Abstracts
Wishful Thinking: Belief, Desire, and the Motivated Evaluation of Scientific Evidence
Cognitive Biases in the Assimilation of Scientific Information on Global Warming and Genetically Modified Food
The Role of Conspiracist Ideation and Worldviews in Predicting Rejection of Science
NASA Faked the Moon LandingTherefore, (Climate) Science Is a Hoax: An Anatomy of the Motivated Rejection of Science
The pivotal role of perceived scientific consensus in acceptance of science

Vaccine misinformation

Effective Messages in Vaccine Promotion: A Randomized Trial
Countering antivaccination attitudes
Negative Affect as a Mechanism of Exemplification Effects
Vaccine Risk Perceptions and Ad Hoc Risk Communication: An Empirical Assessment
The Effects of Anti-Vaccine Conspiracy Theories on Vaccination Intentions
I Immunise: An evaluation of a values-based campaign to change attitudes and beliefs

Interventions to reduce motivated reasoning

Overcoming Intuition: Metacognitive Difficulty Activates Analytic Reasoning
Disfluency disrupts the confirmation bias
Polarized Attitudes Toward the Ground Zero Mosque are Reduced by High-Level Construal
Political Extremism is Supported by an Illusion of Understanding

Perceptions of group size and composition

Measuring misperceptions

Flash report rubric

Criteria	A	A-/B+	B/B-	C/D/F
Introduction and theory	Precisely identifies research hypotheses and provides strong substantive and theoretical motivations for research project	Identifies research hypotheses and provides substantive and theoretical motivations for research project	Hypothesis described but not precisely or correctly specified; motivations incomplete or unconvincing	Theory incorrectly or vaguely stated; lacks appropriate substantive and/or theoretical motivation
Methods	Specifies all important aspects of how study was conducted in detailed and replicable fashion; convincingly motivates and defends key choices in design process	Specifies most important aspects of how study was conducted in relatively clear manner; addresses possible concerns about key choices in design process	Specifies some important aspects of how study was conducted; methods not always well-explained; does not sufficiently address possible concerns about choices in design process	Does not provide or clearly explain most important aspects of how study was conducted; lacks appropriate justification of key design choices
Results	Figures and tables illustrate findings in an intuitive and easy-to-understand way; text explains results precisely and without statistical errors; investigation of hypothesis thorough and detailed	Figures and tables illustrate findings reasonably clearly; textual explanations of results is clear; statistical approach largely correct and error-free	Figures and tables unappealing or poorly constructed; some imprecision or errors in textual discussion of results; hypotheses not thoroughly investigated	Figures and tables sloppy or hard to understand; text vague or incorrect; statistical errors in analysis; cursory investigation of hypotheses
Discussion and conclusions	Perceptive and detailed discussion of limitations of findings, potential explanations for those findings, substantive and theoretical conclusions, and possible future research	Clear and thoughtful discussion of limitations of findings, potential explanations for those findings, substantive and theoretical conclusions, and possible future research	Some useful discussion of limitations of findings, potential explanations for those findings, substantive and theoretical conclusions, and possible future research	Vague, incomplete, or unconvincing discussion of limitations, implications, and conclusions
Writing quality	Exceptionally well-written—precise, clear, and mistake-free; concise and elegant	Very well-written—clear and articulate; few or no typos; not too long	Moderately well-written; some typos; wordy or vague	Unclear, awkward, or imprecise writing; numerous typos; too long and wordy or too short and vague

Critiques rubric

Criteria	A	B	C/D/F
Thesis/argument	Clear, strong arguments that go beyond description, address important objections	Discernible arguments but not strong/clear enough or too much description	Unclear or weak arguments; mainly description or assertion; incomplete
Originality	Creative new arguments or approaches—combines or applies theories in new ways	Some analytical originality in approach; opportunities for greater creativity	Little originality; relies mainly on arguments and evidence from class/sources
Evidence	Numerous, varied, and relevant details and facts provided in support of arguments	Details and facts support arguments, but more needed or some lacking relevance	Some details and facts to support arguments, but not enough and/or lack relevancy
Use of course concepts	Excellent understanding of course concepts and insightful application to research topic	Conveys familiarity with course concepts; applies concepts to topic appropriately	Basic course concepts not applied appropriately; incorrect or incomplete
Organization	Clear, logical organization that develops argument appropriately; does not stray off topic	Organization not totally clear; some digressions or lack of needed structure	Organization is unclear and/or paper strays substantially from agreed-upon topic
Quality of expression	Excellent grammar, vocabulary, and word choice	Some errors, imprecision, or room for improvement in writing	Awkward, imprecise, sloppy, or error-filled writing

Guide to setting your directory and opening data in Stata

1. All analysis in Stata should be conducted using `.do` files, which are scripts we use to ensure that our results are replicable. Each should begin by opening the original source data (don't modify it!).

2. Your `.do` file *must* begin with the `clear` command. This will ensure that you clear the memory of Stata before opening a dataset, preventing an error that will otherwise occur if you already have data open (even if you opened the data during a previous run of the `.do` file that you are working on).

3. The `clear` command should be followed by a `cd` command telling Stata the path to the folder where your data lives, which is called the working directory (you can get the correct path by selecting the data file and choosing Get Info on a Mac from the file menu or right-clicking on a file in Windows and selecting Properties). The path should be specified as `"/users/..."` or `"C:"` depending on whether you have a Mac or PC. Type `help cd` in Stata or click the link in the help file to the manual for more. (Note: I recommend creating a GOVT 10 Stata folder for your data and `.do` files, which will help keep you organized and avoid cluttering your desktop.)

4. The CSV data files needed for the problem sets are listed above — make sure to save them to the correct directory. To open them, use the `import delimited` command, which opens non-Excel spreadsheet files that aren't in Stata format (see `help import delimited` for more). To open a Stata data file (`.dta`) that is in your working directory, use the `use` command instead. Sample code for my computer:

```
clear
cd "/Users/bnyhan/Documents/Dropbox/Quantitative Political Analysis/Outside data/"
import delimited "Iran_2009.csv"
```

or

```
clear
cd "/Users/bnyhan/Documents/Dropbox/Quantitative Political Analysis/Outside data/"
use "gdpvote.dta"
```

5. Any operations or analysis that you wish to perform should follow in the `.do` file below the code described above. Stata will run each line of the file in order.

6. The sample `.do` file provided on Canvas includes Stata code that you can easily adapt for your own analyses.

7. For more assistance, please consult the many resources listed earlier in the syllabus.

Notes on Qualtrics and general suggestions

Qualtrics notes:

- You typically want to randomize at the block level in Qualtrics - see http://www.qualtrics.com/university/researchsuite/ advanced-building/survey-flow/block-randomization. In the simplest version, you put the treatment condition in one block, control condition in another, and randomly present one (see instructions at link above), but this design can easily be made more complex as needed. (Note: You must have at least two blocks so that Qualtrics can randomize among them. Do not turn on "Evenly present elements" — we want a random draw for each respondent.)

- You can also randomize question order (see http://www.qualtrics. com/university/researchsuite/advanced-building/ blocks-and-block-options/question-randomization) and the order of response options (see http://www.qualtrics.com/university/researchsuite/ basic-building/question-options/choice-randomization).

- To insert an image, see http: //www.qualtrics.com/university/researchsuite/basic-building/ editing-questions/rich-text-editor/insert-an-image.

- Qualtrics has very useful files that you can find using Google. For instance, I found the link above with `insert image qualtrics` as my search terms. So if you're stuck, just Google. For instance, to create a new block, you would search for `qualtrics new block`, which will lead you to http://www.qualtrics.com/university/researchsuite/ advanced-building/blocks-and-block-options/about-blocks.

- After completing your study in Qualtrics and downloading the data, you will have to process it slightly before it is ready for use in Stata. Usually the first row in a data file consists of variable names and the observations begin on the second row, but Qualtrics puts variable labels or question wording in row 2 below the variable name, which causes Stata to create a phantom observation and treat all of your variables as strings. You should create a new version of the spreadsheet, delete row 2, save the spreadsheet, and import that file (once saved) into Stata.

- To determine which randomized block was viewed by respondents in the Qualtrics data, your best bet is to look at the text for each variable in the results. The blocks should be listed as two (or more) different variables in the CSV output file that you open in Excel. If you tell it to code unseen items as -99 on the download results screen, you should most likely see 1 in the column corresponding to the block they saw and clicked through and -99 for the one they didn't. Or if they didn't click

through on the block that they saw, it should be blank instead of taking a value of 1. You can then use these values to generate a treatment variable in Stata that takes a value of 1 if they were in the treatment condition and 0 if they were in the control condition (or correspondingly for more complicated designs).

- Your data will come from Qualtrics in a form that often doesn't mean anything. For instance, if your treatment variable `qualtricstr` has the values of 1 for treatment and 4 for control, you need to make a new variable in Stata like this:

```
gen treatment=. /*missing as default*/
replace treatment=0 if qualtricstr==1
replace treatment=1 if qualtricstr==4
```

If your outcome variable starts with low values as high or in some other form that is nonsensical to analyze directly, then you need to make a new variable where the values make sense. Consider an Obama approval variable that comes in from Qualtrics as 1=approve, 2=disapprove, 3=don't know. You need to make a new variable to analyze where high values represent what the variable is called and/or means like this:

```
gen obamaapp=.
replace obamaapp=1 if approve==2
replace obamaapp=2 if approve==3 /*treats DK as neutral/middle*/
replace obamaapp=3 if approve==1
```

- Once your data are imported into Stata and you have made new variables to work with in this way (when necessary), I recommend consulting the sample do-file on Canvas for syntax to follow in performing common statistical procedures.