

SPIA 403/404:

Conspiracy theories: challenges and solutions

I. WHEN AND WHERE: Mondays from 1:30pm to 4:00pm
Room: 140 Peyton Hall

II. INSTRUCTOR: Alin Coman, Ph.D.
acoman@princeton.edu
Office hours: by appointment

III. COURSE DESCRIPTION/OVERVIEW: A misinformation epidemic has been consuming our communities in this relatively new – technologically-advanced - informational landscape. This epidemic spans from the dissemination of isolated pieces of misinformation through social networks, all the way through the development of highly contagious and highly resilient conspiracy theories endorsed by tight-knit communities. We will survey relevant social science literature to understand the factors that facilitate the spread of misinformation and conspiracy theories. Building on current empirical approaches, we will discuss: (a) the psychological and social mechanisms that facilitate the endorsement of conspiracy theories and (b) the strategies aimed at addressing this epidemic. As part of this research seminar we will attempt to design research projects to innovate on both (a) and (b).

IV. INSTRUCTIONAL APPROACH:

Each class period will include a mix of brief lectures highlighting and expanding on key points from the readings and answering any questions about them, class discussion, and active learning exercises in which we examine and apply the ideas introduced in the readings.

V. GRADING: Grading is distributed as follows:

You will receive two separate grades (you need to pass each one independently to pass the class):

Grade 1: Independent Work grade for the Final Junior Paper

Grade 2: Class grade combining Research Seminar and Methods Lab as below:

Research Seminar (60%)

- 45% Class assignments (20% Reading reflections + 15% Midterm Research presentation+10% Conspiracy theory case study)
- 25% Seminar participation
- 20% Final Oral Presentation
- 10% Participation in demos and exercises

Methods Lab (40%)

- TBD by your Methods Lab instructors

Note: Documents with guidelines for class assignments are on Canvas.

VI. SEMINAR PARTICIPATION, READING REFLECTIONS, AND ASSIGNMENTS

Seminar participation. The seminar will involve class discussions throughout. For each journal article that is assigned, you are expected to come to class prepared to discuss both the *substantive conclusions* that can be drawn from the research studies in the article, and also the *research methods* used in the studies. Specifically, you should be prepared to answer or comment on the following questions, with respect to each of the studies that you read: What was the point of the research? What was the hypothesis of each study (or of the key studies)? What methods were used to test the hypotheses (e.g., Who were the participants? What was the experimental design? What were the independent variables – i.e., what did the experimenters manipulate, and how? What were the dependent variables – i.e., what did the experimenters measure, and how?). What were the results of each key study? What conclusions do *you think* can be drawn from these results?

Reading reflections. Readings are available on Canvas. You will be expected to do the assigned readings *before* each class, to come to class prepared for discussion, and to participate actively in each week's discussion. Before each class, you will submit reflections on that day's readings on Canvas (by noon the day of the class). There will be 8 weeks of reflections. Guidelines are provided on Canvas.

Assignments. Apart from the readings assigned each week, there are 8 assignments spaced throughout the course of the semester, some in-class

and some out-of-class (see deadlines and details at the end of the Syllabus). These include exercises to demonstrate certain concepts, submitting brief entries to specific questions, presenting research ideas and case studies. The details of the assignments are provided on Canvas.

VII. JP draft and final paper. A draft of your JP is due **January 10**, 5pm. Papers should not exceed 24 pages using the formatting specified in the WWS Guide to Independent Work. (The page count does not include the title, briefing paper, and bibliography.) The paper should:

- specify a clear research hypothesis and justify its significance in scholarly literature and relevance to policy
- describe methods to test the hypothesis (including descriptions of participants, procedures, materials, experimental design, and measures)
- clearly state the predicted results (in plain English, with descriptions of uncomplicated statistics to back it up), including figures depicting these results
- offer conclusions involving both implications and limitations.

In appendices you also should include your questionnaires, and verbatim experimental stimuli. The paper should be original, clearly written, and include appropriate citation of sources. After receiving comments from me, you will revise your paper and submit the final paper by the due date, **January 17th**, 5pm.

The guidelines for an **A-grade JP**: The paper is an outstanding work that has all of the following qualities:

- is well-organized and exceptionally well-written
- presents a clear articulation of the issue and its significance
- demonstrates excellent research skills
- makes a logical and thorough presentation of evidence and
- has conclusions that flow logically from analysis

TOPIC OVERVIEW

INTRO AND SETUP

Week 1: The psychological science of individual and collective beliefs

Week 2: The origins of conspiracy theories

Week 3: Conspiracy theories: case studies

Week 4: Conspiracy theories: outstanding research questions

PROJECTS

Week 5: Midterm Presentations (Research project proposal presentation)

(Week 6: Break)

MECHANISMS OF FORMATION

Week 7: Marketplace of ideas: spread of cognitive products

Week 8: Psychological facilitators/attenuators of conspiracy theories

Week 9: Dissemination in social networks

INTERVENTIONS

Week 10: Psychological interventions of belief change

Week 11: Attacking conspiracy theories: failures and successes

PROJECTS

Week 12: Final Presentations & Feedback

Week 13: Final Presentations & Feedback

READING LIST

Week 1 (September 12)

Topic: *Introductory: the psychology of beliefs*

Readings:

Shermer, M. (2011). *The believing brain. From ghosts and gods to politics and conspiracies*. Henry Holt and Company, New York. Prologue + Part III + Epilogue

Week 2 (September 19)

Topic: *The origins of conspiracy theories*

Readings:

Radnitz, S., & Underwood, P. (2017). Is belief in conspiracy theories pathological? A survey experiment on the cognitive roots of extreme suspicion. *British Journal of Political Science*, 47(1), 113–129.

Enders A., Farhart C., Miller J., Uscinski J., Saunders K., Drochon H. (2022). Are Republicans and Conservatives More Likely to Believe Conspiracy Theories? *Political Behavior*, 22:1-24.

Context:

- David Robson. [The illusion of knowledge that makes people overconfident](#). BBC

Week 3 (September 26)

Topic: *Conspiracy theories: case studies*

Readings:

Williams M.N., Marques M.D., Hill S.R., Kerr J.R., Ling M. (2022). Why are beliefs in different conspiracy theories positively correlated across individuals? Testing monological network versus unidimensional factor model explanations. *British Journal of Social Psychology*, 61(3):1011-1031.

Context:

- Kevin Roose. [What is QAnon?](#) The New York Times
- Adrienne LaFrance. [The prophecies of Q.](#) The Atlantic

Week 4 (October 3)

Topic: *Conspiracy theories: outstanding research questions*

Readings:

Pennycook, Gordon et al. 2021. A Practical Guide to Doing Behavioral Research on Fake News and Misinformation. *Collabra: Psychology* 7(1): 25293.

Uscinski, J.E. (2018). The Study of Conspiracy Theories. *Argumenta* 3, 2, 233-245.

Context:

- [Elzbieta Drazkiewicz. Study conspiracy theories with compassion.](#) Nature.

Week 5 (October 10)

Topic: Midterm *presentations*

Readings: NONE

Week 6 (October 17)

FALL RECESS – NO CLASS

Week 7 (October 24)

Topic: *Marketplace of ideas: the spread of cognitive “products”*

Readings:

Heath, C., & Heath, D. 2007. *Made to Stick: Why Some Ideas Survive and Others Die*. Random House. Introduction & Chapter 1 (pp.3-62).

Context:

- Lynne Duke. [The word at war. Propaganda? Nah, Here’s the Scoop, Say the Guys Who Planted Stories in Iraqi Papers, Washington Post, 2006](#)

Week 8 (October 31)

Topic: *Psychological facilitators/attenuators of conspiracy theories*

Readings:

Whitson J.A., Galinsky AD. (2008) Lacking control increases illusory pattern perception. *Science*, 3;322(5898):115-7

Graeupner, D., & Coman, A. (2017). The dark side of meaning-making: how social exclusion leads to superstitious thinking. *Journal of Experimental Social Psychology*, 69, 218-222.

Context:

Patricia Cohen. [Italian praised for saving Jews is now seen as a collaborator](#). *The New York Times*

Week 9 (November 7)

Topic: *Dissemination of information through social networks*

Readings:

Borgatti SP, Mehra A, Brass DJ, Labianca G. (2009). Network analysis in the social sciences. *Science*, 13;323(5916):892-5.

Gladwell, M. (2000). *The tipping point* - Chapter 2: The law of the few: connectors, mavens and salesmen.

Soroush V., Roy, D., & Aral, S.K. (2018). The spread of true and false news online. *Science* Vol. 359, No. 6380: 1146-1151.

Context:

- Laura Spinney. [The shared past that wasn't](#). *Nature*.

Week 10 (November 14)

Topic: *Psychological interventions of belief change*

Readings:

Douglas K.M., Sutton R.M., Cichocka A. (2017). The Psychology of Conspiracy Theories. *Current Directions in Psychological Science*, 26(6):538-542.

Vlasceanu, M, Morais, M., & Coman, A. (2021). The effect of prediction error on belief update across the political spectrum. *Psychological Science*, 32(6):916-933.

Maertens, R., Roozenbeek, J., Basol, M., & van der Linden, S. (2021). Long-term effectiveness of inoculation against misinformation: Three longitudinal experiments. *Journal of Experimental Psychology: Applied*, 27(1), 1–16.

Context:

- Nico Grant & Tiffany Hsu. [Google Finds 'Inoculating' People Against Misinformation Helps Blunt Its Power](#). New York Times

Week 11 (November 21)

Topic: *Attacking conspiracy theories: failures and successes*

Readings:

Sunstein, C.R. & Vermeule, A. (2008) "Conspiracy Theories" (John M. Olin Program in Law and Economics Working Paper No. 387)

Dalege J. & van der Does T. (2022). Using a cognitive network model of moral and social beliefs to explain belief change. *Science Advances*, 19;8(33).

Context:

- Jack Nicas. [Can YouTube Quiet Its Conspiracy Theorists?](#) New York Times, 2020

Week 12 (November 28)

Topic: FINAL PRESENTATIONS & FEEDBACK

Week 13 (December 5)

Topic: FINAL PRESENTATIONS & FEEDBACK

WEEK #	Assignment description	Submission date/time	Notes
Week 1	N/A	N/A	N/A
Week 2: Origins of conspiracy theory	Assignment 1: 1-2 paragraphs with reasons of why people endorse conspiracy theories	Submission by September 19 at 12pm in Canvas	Provide at least 2 reasons
Week 3: Case studies	Assignment 2: Present a well-known conspiracy theory (small group task)	In-class presentation (September 26)	Presentations should be 20 minutes per group + 10 minutes Q&A It cannot be QAnon, since that's in the readings for that week.
Week 4: Outstanding questions	Assignment 3: Design a conspiracy theory (small group task). You will be asked to design a conspiracy theory and come up with a description that will be given to online participants to evaluate how persuasive and believable it is.	In-class exercise (October 3)	We will empirically test the most convincing conspiracy theory among the proposed ones. The winning team will win custom designed t-shirts.
Week 5: Midterm projects	Assignment 4: Present the JP proposal to the class (individual task)	In-class presentation (October 10). A brief 500-word summary of the research project proposal should be submitted on Canvas by Wednesday, October 5	Presentations should be 15 minutes + 10 minutes Q&A
Week 6: Break	N/A	N/A	N/A

Week 7: Marketplace of ideas	Assignment 5: The Instagram propagation exercise (individual task). You will be asked to upload an image on Instagram of your own choosing, and we will tally whose image receives most reactions.	Released on October 24, but data to be submitted by Friday, October 28 (5pm)	The winner will receive a copy of: "Made to stick: Why some ideas survive and others die"
Week 8: Psychological facilitators/ attenuators	Assignment 6: The Network mapping exercise (individual task).	In-class exercise (October 31)	Brief survey will be distributed in class
Week 9: Dissemination in networks	N/A	N/A	N/A
Week 10: Psychological interventions	Assignment 7: Playing the Bad News game (game played in pairs)	In-class exercise (November 14)	Teams of 2 students; 20 minutes of game play. Winning pair will receive mugs with the Bad News logo.
Week 11: Attacking conspiracy theories	Assignment 8: A brief document (1-2 paragraphs) explaining how you would try to attack a conspiracy theory if you were a governmental agency that might be affected by its spread (individual task).	Submission by November 21, at 12pm in Canvas	Provide at least 2 strategies
Week 12: Final presentation	Present the final project to the class (individual task)	In-class presentation (November 28)	20 min. + 5 min. Q&A
Week 13: Final presentation	Present the final project to the class (individual task)	In-class presentation (December 5)	20 min.+ 5 min. Q&A