

**The Politics of Scientific Expertise**  
**PSCI/INTR 245/245W**  
Spring 2024

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Syllabus Version 1.2.2

The COVID-19 pandemic has highlighted the importance of scientific expertise in crafting policy – yet polling, and well-known examples of political rhetoric, demonstrate a deterioration of public trust in scientific experts among some factions of the public. This course examines the politics of scientific expertise to explore what motivates scientific experts, how experts interact with policymakers, and how the public views science and expertise.

**Course Meetings:**

Tuesdays and Thursdays, 11:05 AM – 12:20 PM, Meliora Hall 224  
First day of class: Thursday, Jan. 18<sup>th</sup>  
Last day of class: Tuesday, April 30<sup>th</sup>

**Office Hours:**

Tuesdays and Thursdays, 10:00 AM – 11:00 AM  
Harkness Hall 322

I try my best to answer all student emails within a 24-hour turnaround period during the school week. If I have not replied to your email within this time period, feel free to follow up with me, as it is possible that I missed your earlier note. Please note that I am away from email between late Friday afternoons and Saturday evenings.

**Class Policies:**

Academic Honesty

This course follows university guidelines regarding academic honesty, available at <http://www.rochester.edu/college/honesty/>. All scholarly work, or non-scholarly work attributable to others (newspapers, blogs, social media posts, etc.) used in your work must be cited in-text and in a comprehensive bibliography. (I recommend the APA style, but you may choose your own preferred style as long as you are consistent.) See also the course policy on generative AI below.

Technology

Laptops will not be allowed in class, and you won't need them (without prior notice for planned in-class activities). We will be using class time for in-person discussions (in addition to the lecture component of the class). All relevant course materials and announcements regarding deadlines, etc. will be posted online, so you won't be responsible for writing down deadlines, logistical details, etc. in class.

You may use generative AI to do research (i.e., to explore topics or test your arguments) or to polish short sections of your writing. You cannot outsource the writing of entire assignments, or substantial parts of assignments (i.e., more than a few sentences out of an entire assignment). You are fully responsible for the substantive content of any assignment you turn in. Furthermore, you are responsible for correct attribution of ideas (i.e., citations), an area in which current generations of generative AI are fairly weak. Incorrect or missing citations will be harshly punished and may, depending on the circumstances, constitute evidence of academic misconduct. If you use generative AI in any way, you are required to write a short statement (1-2 sentences) explaining how you used it and may be required to provide information such as why you think it improved your output, what prompts you used, etc..

### Attendance

Attendance will not be taken; however, class participation (asking questions, volunteering answers, contributions to group conversations) will be tracked (so, you cannot get full class participation by attending but never speaking). Approved absences from class due to illness or major extenuating circumstances can be cleared with instructor approval subject to completion of a makeup assignment.

### Deadlines

In the interest of fairness, and to ensure you complete assignments in the amount of time I intend for you to spend, deadlines are strictly and impartially enforced with no exceptions outside of documented emergencies. "Due at 5pm" means an assignment submitted at 5:00 is on time and on 5:01 is late. The penalties for late work are as follows:

1. Reading response assignments submitted late receive zero credit.
2. Other assignments (i.e., components of the writing project) submitted late receive an automatic reduction of 10%. After this penalty, they lose an additional 10% for every 24 hours (calculated proportionately). For instance, an assignment submitted 12 hours late can, at most, earn a score of 85% ( $100 - 10 - 10 * (12/24)$ ).

In order to give you room for occasional mistakes, and to reward high levels of effort, anyone who turns in 100% of all assignments over the course of the semester, even if some of them are late, will receive a 5% work completion bonus.

**Grading:**

<b>Assignment</b>	<b>Percent of Final Grade</b>	<b>Due Date</b>
Class Participation	10%	
Reading Assignments	15%	See calendar; due Mondays at 5pm
Writing project proposal	5%	Tuesday, Feb. 20 <sup>th</sup> , 5pm (due on Tues. due to President's Day)
Writing project outline	10%	Monday, March 25 <sup>th</sup> , 5pm
Writing project final draft	20%	Monday, April 29 <sup>th</sup> , 5pm
Group project draft	10%	Monday, April 1 <sup>st</sup> , 5pm
Group project presentation	25%	Monday, April 22 <sup>nd</sup> , 5pm
Group project reflection	5%	Monday, April 29 <sup>th</sup> , 5pm
Total	100%	
Work completion bonus	5%	
Total credit possible including work completion bonus	105%	

## Schedule:

Unit	Week of	Agenda	Assignment
0: Introduction	Jan. 15 <sup>th</sup>	Introduction	NA
1: Science and Empiricism	Jan. 22 <sup>nd</sup>	What is science?	Perusall quiz + academic honesty acknowledgement
	Jan. 29 <sup>th</sup>	The historical origins of science	Mokyr (2005)
	Feb. 5 <sup>th</sup>	Big claims require big evidence	Tröhler (2015)
2: The Social World of Science	Feb. 12 <sup>th</sup>	Credit, competition, and cooperation	Galileo (1623)
	Feb. 19 <sup>th</sup>	Scientific institutions	Writing project proposal
	Feb. 26 <sup>th</sup>	Misincentsives	Azoulay, Fons-Rosen, and Graff Zivin (2019)
3: Science and Policy	Mar. 4 <sup>th</sup>	Personal politics	Hersh and Goldenberg (2016)
	Mar. 11 <sup>th</sup>	SPRING BREAK	
	Mar. 18 <sup>th</sup>	Technocrats	Haas (1992)
	Mar. 25 <sup>th</sup>	Strategic actors	Writing project outline
4: Science and the Public	Apr. 1 <sup>st</sup>	Public opinion	Group project draft
	Apr. 8 <sup>th</sup>	Trust in science	Alsan and Wanamaker (2018)
	Apr. 15 <sup>th</sup>	Studying science	Oreskes (2011)
5: Reflections and Presentations	Apr. 22 <sup>nd</sup>	Wrap-up, presentations	Group project slides
	Apr. 29 <sup>th</sup>	Presentations	Final paper

## Reading list:

All readings/videos will be available on Blackboard via the Perusall tool.

Alsan, Marcella, and Marianne Wanamaker. 2018. "Tuskegee and the Health of Black Men." *The Quarterly Journal of Economics*, 133, 1, Pp. 407-455.

Azoulay, Pierre, Christian Fons-Rosen, and Joshua S. Graff Zivin. 2019. "Does Science Advance One Funeral at a Time?" *American Economic Review*, 109 (8): 2889-2920.

Galilei, Galileo. "The Assayer." (1623) Stillman Drake, trans. Available at <https://web.stanford.edu/~jsabol/certainty/readings/Galileo-Assayer.pdf>.

Haas, Peter M. "Introduction: epistemic communities and international policy coordination." *International organization* 46.1 (1992): 1-35.

Hersh, Eitan D., and Matthew N. Goldenberg. "Democratic and Republican physicians provide different care on politicized health issues." *Proceedings of the National Academy of Sciences* 113.42 (2016): 11811-11816.

Mokyr, Joel. (2005) "The Intellectual Origins of Modern Economic Growth." *Journal of Economic History* 65:2, p. 285-351.

Oreskes, Naomi. (2021) *Why Trust Science?* Princeton University Press. Author interview at: <https://www.youtube.com/watch?v=t7PwqiiQmVM>

Tröhler, Ulrich. (2015) "Statistics and the British controversy about the effects of Joseph Lister's system of antisepsis for surgery, 1867–1890." *Journal of the Royal Society of Medicine* 108(7), p. 280-287.

### **Supplemental Readings:**

These may be referenced in lectures and may be updated; they are not required reading.

Alsan, Marcella, and Sarah Eichmeyer. "Experimental Evidence on the Effectiveness of Non-Experts for Improving Vaccine Demand." *NBER Working Paper w28593* (2021).

Bursztyn, Leonardo, et al. *Opinions as Facts*. No. 159. ECONtribute Discussion Paper, 2022. (Forthcoming, Review of Economic Studies).

Dittmar, Jeremiah. (2019) "The Economic Origins of Modern Science: Technology, Institutions, and Markets." Working paper.

Gelman, Andrew. (2018) "Essay: The Experiments Are Fascinating. But Nobody Can Repeat Them."

Kennedy, Brian, Alec Tyson, and Cary Funk. (2022) "Americans' Trust in Scientists, Other Groups Declines." Pew Research Center. <https://www.pewresearch.org/science/2022/02/15/americans-trust-in-scientists-other-groups-declines/>

King, Gary. 1995. "[Replication, Replication.](https://tinyurl.com/mvc5kg5)" *PS: Political Science and Politics*, 28, Pp. 444-452. Copy at <https://tinyurl.com/mvc5kg5>

Ottaviani, Marco, and Peter Sørensen. "Information aggregation in debate: who should speak first?" *Journal of Public Economics* 81.3 (2001): 393-421.

Starr, S. Frederick. (2013). *Lost enlightenment: Central Asia's golden age from the Arab*

*conquest to Tamerlane*. Princeton University Press.

Zaller, John R. *The nature and origins of mass opinion*. Cambridge university press, 1992.  
Chapter: "Elite domination of public opinion."

Youde, Jeremy. 2005. "The Development of a Counter-Epistemic Community: AIDS, South Africa, and International Regimes." *International Relations* 19 (4): 421–39. <https://doi.org/10.1177/0047117805058533>.