

**Sociology 476:**  
**The Politics of Knowledge:**  
**A Sociological Introduction to**  
**Science and Technology Studies**  
**Fall 2023**

**Mondays, 10:00-12:50, in Parkes 222**

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**Office hours this quarter (by appointment)**

**For exact availability (both in-person and via Zoom) and to sign up for a slot in advance:**

**<https://calendly.com/professor-epstein>**

*A copy of this syllabus can be found on the Canvas site for the course.*

*Direct link: <https://canvas.northwestern.edu/courses/197555>*

## **Summary:**

This course is motivated by the assumption that knowledge and technology have become increasingly central to the social, cultural, political, and material organization of modern societies. The fundamental goal of the course is to develop intellectual tools to understand not merely the social organization of knowledge, science, and technology but also the technoscientific dimensions of social life. Although much of the course content concerns science and technology, the theoretical and analytical frameworks developed in this course are intended to apply to any domain involving knowledge, expertise, technologies, or formalized techniques.

By examining the social, cultural, political and material dimensions of knowledge production, distribution, and uptake, the course provides a broad introduction to sociological perspectives within the field of science & technology Studies (STS). While being sensitive to the interdisciplinary character of STS, we will emphasize the following questions:

- What have been the dominant approaches to the sociological study of science, knowledge, and technology? How have different schools developed, what sorts of questions do they ask, what theories and analytical tools do they offer, and how do they differ?
- How do these various approaches help us understand such topics as:
  - Why we believe what we believe (the politics of knowledge production, circulation, and reception);
  - the impact and uptake of technologies and the assessment of technological risks;
  - the character of life in expert-driven “knowledge societies”;
  - the resolution of conflicts around knowledge and technology (and the use of knowledge and technology in conflict resolution);
  - the encounters between and across different knowledge systems, ways of knowing, and epistemic cultures, both locally and globally;
  - the use of technologies to tell us “who we are” and “where we belong”;
  - the social and technological reproduction of inequalities, including those related to social class, race and ethnicity, gender, sexuality, location in global hierarchies, and so on;
  - the relations between activists and experts, and the tensions between expertise and democracy;
  - the roles of social movements when intervening in debates about knowledge, science, and technology, as well as the use of knowledge and technology by social movements; and
  - the nature of governance in technologically sophisticated societies—including the character of collective decision-making about knowledge and technology, as well as the uses of knowledge and technology to arrive at such decisions?
- In which ways are present-day studies of science and technology consistent with, and in which ways are they in tension with, other approaches to understanding knowledge, culture, politics, etc., that are employed within sociology today?

- How might sociology as a field of study benefit from closer engagement both with epistemic concerns and with the material aspects of our technosocial world?
- What are the implications of our analysis of science for an understanding of the practice of sociology itself as a scientific endeavor?

Needless to say, in a course with nine sessions, the assigned reading is a small subset of relevant literature, and we will be leaving out many classics as well as many important recent works. I will be posting on Canvas a separate list of recommendations for further reading and notes about relevant journals in the field. That information should be helpful to you as you work on your papers for the course; it should also provide resources for students who seek to develop a more thoroughgoing expertise in STS or the sociology of science and technology.

Although many of the themes we will address have a long history, the emphasis will be on intellectual developments of the last several decades. A lot (but not all) of the course content focuses on the United States, though we will try whenever possible to place developments in a global context and we will benefit from comparative and postcolonial approaches to STS. While much of the scholarship we will consider is broadly sociological, some of it is drawn from other fields, and part of the goal of the course is to suggest the interdisciplinary character of STS. Students from other disciplines are welcome.

## **Course Requirements:**

Your grade for the quarter will be based on participation (25%) and a final paper (75%). Participation has three components: attendance, engagement in class discussions, and preparation of discussion questions. More specifically:

1) Students (including auditors) are expected to **attend** the seminar regularly and **contribute** actively to our discussions.

2) In addition, each student will be asked to circulate **discussion questions** in advance of two class meetings during the quarter. (Auditors are asked to do this once.) Students will sign up for specific weeks at the first meeting of the seminar. These questions must be distributed to all participants in the seminar by **noon on the day before class**. Please use Canvas to email the questions as a Word file to all students in the class.

Ideally, the questions should help frame the seminar discussion by asking about key arguments and concepts, juxtaposing and comparing readings, thinking about the theoretical perspectives as well as the methods employed, raising concerns, and beginning the process of articulating critiques. Keep in mind that the goal is to facilitate discussion (not to stump the audience).

Please come up with **two or three questions per reading**, for at least three of the readings for the week. Please **number your questions in a single sequence** (to make it easier to refer to them in class), and please take the time to spell authors' names and terms correctly. Finally, please note that I would like each person assigned to a given week to prepare their own questions—that is, I would like us to have multiple sets of questions, rather than one collaborative set.

**Everyone should read and think about the distributed discussion questions before class.** I will try to make sure we address as many of them as possible during the seminar meeting. In addition, the students who prepare questions for the week should take responsibility to help bring us back to those questions during the discussion.

3) Students taking the course for credit must submit a **paper** (around 20 double-spaced pages in length, *not including* references) by **10 am on Monday, December 4**. Please submit the paper as a Word file sent by email attachment to [s-epstein@northeastern.edu](mailto:s-epstein@northeastern.edu). I will do all my grading on the email attachment and then email it back to you. (Note: While 20 pages plus references is the recommended length, I'll accept anything up to 25 pages plus references. Please don't exceed the maximum.)

The paper need not deal directly with the domains of science or technology, as long as it engages with the questions concerning the “politics of knowledge” that are at the heart of this course. (See pp. 2-3 above.) I am relatively open about directions in which you might take your paper, provided that you get my approval for your topic as described below. Your paper may be empirical with a theoretical framing, or it may take the form of a critical review of the literature. In either case, the paper must draw explicitly on course

materials but must also extend beyond course readings. (You may find the list of recommended readings helpful for the latter purpose.)

Although in practice your paper may be a “first stab” at something you will develop in greater detail later (for example, a second-year paper, special field paper, or dissertation prospectus), it should stand on its own and not read like a rough draft. The paper should articulate an identifiable argument. (That is, even a paper that is just outlining a future research project should still have a thesis statement up front. If you have any questions about this, I advise you to talk to me about it.) In addition, the paper should be addressed to a general academic reader and should not assume a reader who attended the class. (It should not reference class discussions or refer informally to “the articles we read for this seminar”).

Please proofread carefully and pay close attention to matters of style, grammar, syntax, and organization. (If your paper has a lot of careless errors and does not seem to have been proofread adequately, I will send it back to you.) The paper should include a title and should be broken into sections with headings. Use parenthetical citations for quotes and references to other texts. List all such texts in your bibliography. (You may use any standard bibliographic style, as long as you are consistent.) Please double-space and use a standard font and margins.

You must get my **approval of your proposed topic** for the paper by emailing me a written description by no later than noon on Friday, October 20 (1-2 paragraphs plus a short reference list). Please send the proposal as an email attachment. If your paper will be thematically similar to, or will have any overlap in actual content with, any other paper you have written in the past or are writing this quarter, please also provide a clear description of the overlap as well as an explanation of how your paper for this class will differ. Such overlap is not necessarily a problem, but we need to come to a clear understanding about it in advance.

In addition, every student **must attend my office hours** at least once—either before or very soon after the submission of the topic—to discuss the paper. (I have scheduled some additional office hours during the weeks of October 16 and 23 to facilitate these meetings.)

If you later want to change your topic, you must request my approval. Please send me a new description in that case.

### **Course Mechanics:**

- ◆ I encourage you to keep me posted about any issues you may be experiencing that might impact your attendance at, participation in, or work for the seminar. Students can find useful resources for safety and security, academic support, and mental and physical health and wellbeing at the NUhelp website (<https://www.northwestern.edu/nuhelp/>). The following link for graduate students may also be helpful:

<https://www.northwestern.edu/hr/benefits/work-life/view-benefits-by-audience.html#Graduate-Students>.

- ◆ We will follow all announced health and safety guidelines with regard to **Covid and other health concerns**. Masks are not currently required. Those who wish to wear masks are very welcome to do so. If you feel you may be contagious, please stay home and contact me.
- ◆ This course will make use of the **Canvas** course management system. The direct link for this course is <https://canvas.northwestern.edu/courses/197555>. Students are responsible for logging in, checking regularly for posted announcements, and obtaining readings and assignments from the site.
- ◆ Important course **announcements** may also be sent to students' registered campus email addresses. You are responsible for monitoring those email accounts.
- ◆ My **office hours** are by appointment, and I will offer both in-person and Zoom options. Please sign up to see me using this link: <https://calendly.com/professor-epstein> (being sure to select the correct set of options, depending on whether you want to meet in-person or via Zoom). Please sign up at least one hour in advance. For Zoom meetings, I will follow up with a link.
- ◆ All required **course readings** are available for download from the Canvas site in the form of PDFs. Please have the readings available during class (either as printouts or in electronic form).

A list of **recommended readings**, organized by week, will be posted on Canvas.

- ◆ **Attendance is required**, and we will use a **discussion format**. Typically, I will make a short introductory presentation at the beginning. (I will post the PowerPoint afterward on Canvas. However, these PowerPoints are not meant to stand alone and may not be comprehensible to anyone who was not present in class.) Our discussion that follows should be grounded in the reading, and it's taken for granted that everyone had done the reading carefully. We will also be guided by the discussion questions that students have prepared and distributed in advance (see above). To make discussions as participatory as possible (and welcoming to students coming from multiple disciplines), I discourage "name-dropping" and "-ism-dropping," unless you take the time to explain your reference to a thinker or school.
- ◆ I discourage **incompletes**, because in my experience they are rarely in students' long-term best interests (and often just the opposite). That said, please be in touch with me promptly to discuss unanticipated circumstances as they arise.
- ◆ Any student requesting **accommodations related to a disability or other condition** is required to register with AccessibleNU ([accessiblenu@northwestern.edu](mailto:accessiblenu@northwestern.edu); 847-467-5530)

and provide professors with an accommodation notification from AccessibleNU, preferably within the first two weeks of class. I keep all such information confidential.

- ◆ I am committed to very strict enforcement of university regulations concerning **academic integrity**. I report to campus authorities all suspected violations of the policy (including suspicion of cheating, plagiarism, fabrication, obtaining an unfair advantage, and aiding and abetting dishonesty). Please take the time to familiarize yourself with the university's [policy on academic integrity](#) as well as the [elaborations from The Graduate School](#). I urge you to speak with me if you have any questions.
  
- ◆ This syllabus and all PowerPoint presentations for this course are copyright 2023 by Steven Epstein. **Please do not post any materials related to the course on the internet without the permission of the instructor.** This includes sites such as “Course Hero.” Students are also prohibited from selling (or being paid for taking) notes during this course to or by any person or commercial firm without the express written permission of Professor Epstein. No **audio or video recordings** of class are permitted without the instructor's permission.

## **Schedule of Readings and Assignments:**

### ***WEEK 1 (September 25): Course Introduction; Sociologies of Knowledge***

Mannheim, Karl. 1936. *Ideology and Utopia*. New York: Harcourt, Brace & World. Pp. 49-78 (Ch. 2, sections 1-6 **only**).

Durkheim, Emile. 1915. *The Elementary Forms of the Religious Life*. London and New York: G. Allen & Unwin. Pp. 462-96 (Conclusion).

**NOTE:** Please focus on p. 462 through the middle of p. 466, then p. 479 at the bottom through the end of p. 493.

Foucault, Michel. 1980. *Power/Knowledge: Selected Interviews and Other Writings, 1972-77*. New York: Pantheon. Pp. 131-33 (excerpt from “Truth and Power”) and 80-85 (excerpt from “Two Lectures”).

### ***WEEK 2 (October 2): From Science as an Agonistic Field to the Sociology of Scientific Knowledge***

Bourdieu, Pierre. 1975. “The Specificity of the Scientific Field and the Social Conditions of the Progress of Reason.” *Social Science Information* 14 (6): 19-47.

Bloor, David. [1976] 1991. *Knowledge and Social Imagery*. 2nd ed. Chicago: University of Chicago Press. Pp. 3-23 (Ch. 1: “The Strong Programme in the Sociology of Knowledge”).

Collins, Harry M. 1974. “The TEA Set: Tacit Knowledge and Scientific Networks.” *Science Studies* 4: 165-86.

Shapin, Steven. 1995. “Cordelia’s Love: Credibility and the Social Studies of Science.” *Perspectives on Science* 3 (3): 76-96.

Pinch, Trevor J., and Weibe E. Bijker. 1993. “The Social Construction of Facts and Artifacts: Or How the Sociology of Science and the Sociology of Technology Might Benefit Each Other.” In *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*, edited by W. E. Bijker, T. P. Hughes and T. J. Pinch, 17-50. Cambridge, MA: MIT Press.

### ***WEEK 3 (October 9): Actor-Network Theory***

Callon, Michel. 1986. “Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St Brieuc Bay.” In *Power, Action, and Belief*, edited by J. Law, 196-233. London: Routledge & Kegan Paul.

Latour, Bruno. 1983. “Give Me a Laboratory and I Will Raise the World.” In *Science*



*Observed: Perspectives on the Social Study of Science*, edited by K. D. Knorr-Cetina and M. Mulkay, 141-170. London: Sage.

Latour, Bruno. 1992. “Where Are the Missing Masses? The Sociology of a Few Mundane Artifacts.” In *Shaping Technology, Building Society: Studies in Sociotechnical Change*, edited by W. E. Bijker and J. Law, 225-258. Cambridge, MA: MIT Press.

#### **WEEK 4 (October 16): Within, Across, and Between Epistemic Cultures**

Haraway, Donna. 1988. “Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective.” *Feminist Studies* 14 (3): 575-599.

**NOTE:** Feel free to stop reading at the end of p. 590.

Knorr Cetina, Karin. 1999. *Epistemic Cultures: How the Sciences Make Knowledge*. Cambridge, MA: Harvard University Press. Pp. 1-25 (Ch. 1: “Introduction”); 46-78 (Ch. 3: “Particle Physics and Negative Knowledge”).

Star, Susan Leigh, and James R. Griesemer. 1989. “Institutional Ecology, ‘Translations’ and Boundary Objects: Amateurs and Professionals in Berkeley’s Museum of Vertebrate Zoology, 1907-39.” *Social Studies of Science* 19: 387-420.

Subramaniam, Banu, Laura Foster, Sandra Harding, Deboleena Roy, and Kim TallBear. 2017. “Feminism, Postcolonialism, Technoscience.” In *The Handbook of Science and Technology Studies: Fourth Edition*, edited by Ulrike Felt, Rayvon Fouché, Clark A. Miller and Laurel Smith-Doerr, 407-433. Cambridge, MA: MIT Press.

**\*\*REMINDER: PAPER TOPICS DUE BY NOON ON FRIDAY, OCTOBER 20.**

#### **Week 5 (October 23): Social Knowledge**

Camic, Charles, Neil Gross, and Michèle Lamont. 2011. “Introduction: The Study of Social Knowledge Making.” In *Social Knowledge in the Making*, edited by Camic, Gross, and Lamont, 1-13 **only**. Chicago: University of Chicago Press.

Mallard, Grégoire, and Andrew Lakoff. 2011. “How Claims to Know the Future are Used to Understand the Present: Techniques of Prospecation in the Field of National Security.” In *Social Knowledge in the Making*, edited by Charles Camic, Neil Gross and Michèle Lamont, 340-377. Chicago: University of Chicago Press.

Balasubramanian, Savina. 2018. “Motivating Men: Social Science and the Regulation of Men’s Reproduction in Postwar India.” *Gender & Society* 32 (1): 34-58.

Vogler, Stefan. 2021. *Sorting Sexualities: Expertise and the Politics of Legal*

*Classification*. Chicago: University of Chicago Press. Pp. 39-56 (Ch. 2: “Seeing Sexuality Like a State”; 57-79 (Ch. 3: “Forensic Psychology, Complicit Expertise, and the Legitimation of Law”); 82-99 (Ch. 4: Insurgent Expertise and the Hybrid Network of LGBTQ Asylum”).

**WEEK 6 (October 30): The Politics of Quantification, Standardization, and Datafication**

Espeland, Wendy, and Vincent Yung. 2019. “Ethical Dimensions of Quantification.” *Social Science Information* 58 (2): 238-260.

Hirschman, Daniel, and Emily Adlin Bosk. 2020. “Standardizing Biases: Selection Devices and the Quantification of Race.” *Sociology of Race and Ethnicity* 6 (3): 348-364.

Rodríguez-Muñiz, Michael. 2021. *Figures of the Future*. Princeton: Princeton University Press. Pp. 1-27 (Introduction); 114-140 (Ch. 4: “Awakening a Giant”).

Tichenor, Marlee, Sally E. Merry, Sotiria Grek, and Justyna Bandola-Gill. 2022. “Global Public Policy in a Quantified World: Sustainable Development Goals as Epistemic Infrastructures.” *Policy and Society* 41 (4): 431-444.

Christin, Angèle. 2017. “Algorithms in Practice: Comparing Web Journalism and Criminal Justice.” *Big Data & Society* 4(2): 1-14.

**WEEK 7 (November 6): Institutions and Politics: Making Identities and Inequalities**

Frickel, Scott, and Kelly Moore. 2006. “Prospects and Challenges for a New Political Sociology of Science.” In *The New Political Sociology of Science: Institutions, Networks, and Power*, edited by S. Frickel and K. Moore, 3-14 **only**. Madison: University of Wisconsin Press.

Epstein, Steven. 2006. “Institutionalizing the New Politics of Difference in U.S. Biomedical Research: Thinking across the Science/State/Society Divides.” In *The New Political Sociology of Science: Institutions, Networks, and Power*, edited by S. Frickel and K. Moore, 327-350. Madison: University of Wisconsin Press.

Reardon, Jennifer. 2001. “The Human Genome Diversity Project: A Case Study in Coproduction.” *Social Studies of Science* 31 (3): 357-388.

Nelson, Alondra. 2008. “Bio Science: Genetic Genealogy Testing and the Pursuit of African Ancestry.” *Social Studies of Science* 38 (5): 759-783.

Panofsky, Aaron, and Joan Donovan. 2019. “Genetic Ancestry Testing among White Nationalists: From Identity Repair to Citizen Science.” *Social Studies of Science* 49 (5): 653-681.

**WEEK 8 (November 13): Professionals, Laypeople, Activists, and the Politics of Expertise**

Wynne, Brian. 1992. "Misunderstood Misunderstandings: Social Identities and Public Uptake of Science." *Public Understanding of Science* 1: 281-304.

Epstein, Steven. 1995. "The Construction of Lay Expertise: AIDS Activism and the Forging of Credibility in the Reform of Clinical Trials." *Science, Technology, & Human Values* 20 (4): 408-437.

Collins, H.M., and Robert Evans. 2002. "The Third Wave of Science Studies: Studies of Expertise and Experience." *Social Studies of Science* 32 (2): 235-296.

**NOTE:** Please focus on pp. 235-42, 249-63, and 269-72.

Eyal, Gil. 2013. "For a Sociology of Expertise: The Social Origins of the Autism Epidemic." *American Journal of Sociology* 118 (4): 863-907.

Epstein, Steven. 2023. "The Meaning and Significance of Lay Expertise." In *The Oxford Handbook of Expertise and Democratic Politics*, edited by Gil Eyal and Thomas Medvetz, 76-102. Oxford: Oxford University Press.

**WEEK 9 (November 20): Technoscientific Governance**

Jasanoff, Sheila. 2005. *Designs on Nature: Science and Democracy in Europe and the United States*. Princeton, NJ: Princeton University Press. Pp. 247-271 (Ch. 10: "Civic Epistemology").

Lezaun, Javier, and Linda Soneryd. 2007. "Consulting Citizens: Technologies of Elicitation and the Mobility of Publics." *Public Understanding of Science* 16: 279-297.

Brandt, Marisa. 2014. "Zapatista Corn: A Case Study in Biocultural Innovation." *Social Studies of Science* 44 (6): 874-900.

Suchman, Lucy. 2016. "Configuring the Other: Sensing War through Immersive Simulation." *Catalyst: Feminism, Theory, Technoscience* 2 (1): 1-36.

**\*\*REMINDER: PAPERS DUE AT 10:00 AM ON MONDAY, DECEMBER 4 (WORD DOCUMENTS BY EMAIL ATTACHMENT TO S-EPSTEIN@NORTHWESTERN.EDU).**