The Politics of Knowledge: A Sociological Introduction to Science and Technology Studies

Fall 2021

Mondays, 10:00-12:50, in University Hall 312

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Office hours this quarter:
By appointment—generally Mondays, 3:00-4:00, and Thursdays, 4:30-5:30
For exact availability and to sign up for a slot in advance:
https://calendly.com/professor-epstein/office-hours

A copy of this syllabus can be found on the Canvas site for the course.
Direct link: https://canvas.northwestern.edu/courses/??????
Summary:

This course is motivated by the assumption that knowledge and technology have become 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 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, etc.;
  - 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 Mechanics:

♦ I expect the past year and a half of disruption from Covid has affected all of us profoundly, though in many different ways. As we continue to adjust to changing circumstances, 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/) and on the NUhelp app (https://www.northwestern.edu/nuhelp/get-help/nuhelp-app-features.html). 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 announced procedures with regard to required safety measures and “modalities” of instruction (in-person, online, hybrid, or anything else yet to be invented). This syllabus, the schedule, and the teaching modalities are subject to change as circumstances dictate. Announcements of changes will be posted on Canvas and emailed to students.

♦ This course will make use of the Canvas course management system. The direct link for this course is https://canvas.northwestern.edu/courses/???. 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.

♦ I will hold office hours by appointment. Please book a time in advance using this link: https://calendly.com/professor-epstein/office-hours. Please be sure to sign up at least an hour in advance.

Typically, my hours will be Mondays, 3:00-4:00 pm and Thursdays, 4:30-5:30 pm. However, this may change somewhat from week to week (and I will schedule additional times when your paper topics are due), so please refer to the website for specific availability.

♦ 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.

♦ 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 below). 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.

♦ Your grade for the quarter will be based on the following course requirements:

1) Students (including auditors) are expected to attend the seminar regularly and participate actively in 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 5:00 pm 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.

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 10:00 am on Monday, December 6. Please submit the paper as a Word file sent by email attachment to s-epstein@northestern.edu. I will do all my grading on the email attachment and then email it back to you.

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 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, please 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 22 (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 will schedule some additional office hours 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.

♦ I discourage incompletes, because in my experience they are rarely in students’ long-term best interests (and often just the opposite).

♦ Any student requesting accommodations related to a disability or other condition is required to register with AccessibleNU (http://www.northwestern.edu/accessiblenu/) and provide me with an accommodation notification from that office, 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 (http://www.northwestern.edu/uacc/) as well as The Graduate School’s policy and procedures (https://www.tgs.northwestern.edu/academic-policies-procedures/policies/academic-integrity.html). I urge you to speak with me if you have any questions.

♦ This syllabus and all PowerPoint presentations for this course are copyright 2021 by Steven Epstein. Please do not post any materials related to the course on the internet without the permission of the instructor. No audio or video recordings of class are permitted without the instructor’s permission.
Schedule of Readings and Assignments:

**WEEK 1 (September 27): Course Introduction; Sociologies of Knowledge**


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


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

**WEEK 2 (October 4): From Science as an Agonistic Field to the Sociology of Scientific Knowledge**


**WEEK 3 (October 11): Actor-Network Theory**

Callon, Michel. 1986. “Some Elements of a Sociology of Translation: Domestication of


**WEEK 4 (October 18): Within, Across, and Between Epistemic Cultures**


**REMINDER: PAPER TOPICS DUE BY NOON ON FRIDAY, OCTOBER 22.**

**WEEK 5 (October 25): The Nature of Social Knowledge and the Politics of Standardization and Quantification**


WEEK 6 (November 1): Institutions and Politics (I): Making Identities and Inequalities


WEEK 7 (November 8): Institutions and Politics (II): Identity, Belonging, and the Molecularization of Race


**WEEK 8 (November 15): Activism and the Politics of Expertise**


**WEEK 9 (November 22): Technoscientific Governance**


**Reminder: Papers due at 10:00 AM on Monday, December 6 (Word documents by email attachment to s-epstein@northwestern.edu).**