

**SCIENCE AND TECHNOLOGY**  
**Sociology 571**

Prof. Catherine Bliss  
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TH 9:30-12:10PM  
Office Hours: by appointment

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Over the past century, science and technology have increasingly permeated everyday life, while institutionalizing and growing in status domestically and globally. Scientific and technological knowledge has become a dominant form of knowledge, overshadowing and overpowering other authoritative forms. This course will explore fundamental sociological theory of science and technology from Sociology and Science and Technology Studies. It will also introduce students to exemplary research in these domains. All inquiry will analyze science and technology from the perspective of its relationship to race, gender, sexuality, and postcoloniality.

**Diversity Statement:**

The Rutgers Sociology Department strives to create an environment that supports and affirms diversity in all manifestations, including race, ethnicity, gender, sexual orientation, religion, age, social class, disability status, region/country of origin, and political orientation. We also celebrate diversity of theoretical and methodological perspectives among our faculty and students and seek to create an atmosphere of respect and mutual dialogue. We have zero tolerance for violations of these principles and have instituted clear and respectful procedures for responding to such grievances.

**Learning Goals:**

This course will engage the major theoretical debates in Science and Technology Studies, while familiarizing students with equally fundamental debates in the sociology of race, gender, sexuality, and postcoloniality. The course will investigate research methodologies for studying science and technology from a sociological perspective, while providing students with experience conducting their own original research project. The course will also focus on professionalization in the fields of Sociology and Science and Technology Studies, acquainting students with relevant professional societies and sections as well as academic and nonacademic career pathways.

**Course Requirements:**

Requirements for this class include attending all course meetings, having done the assigned reading. Students will be expected to participate in all discussions. (60% of your grade)

The major piece of required work will be a final paper, 20-25 pages in length, which investigates one aspect of science and technology from a sociological perspective (see Paper Guidelines). Students will be expected in their writings to show that they know how to use theory and empirical studies to support their theses. The paper will be due December 17 at 5pm. (40% of your grade)

Students must purchase the latest edition of each of the assigned books. Many chapters and articles may be found free online. Most books are available in an e-format.

### Required Readings:

Week 1. Introduction to Science and Technology Studies Approaches: Sociology of Science Then and Now

Merton, Robert. 1973. *The Sociology of Science*. Chicago, IL: University of Chicago Press. Chapters 12-18 (skim).

Haraway, Donna. 1999. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective" in *The Science Studies Reader*. New York: Routledge. 172-188.

Nelson, Alondra. 2018. Elizabeth Warren and the Folly of Genetic Ancestry Tests. *New York Times*. <https://www.nytimes.com/2018/10/17/opinion/elizabeth-warren-and-the-folly-of-genetic-ancestry-tests.html?searchResultPosition=1>

Richardson, Sarah and Rene Almeling. 2016. The CDC Risks its Credibility with New Pregnancy Guidelines. *Boston Globe*. <https://www.bostonglobe.com/opinion/2016/02/08/the-cdc-risks-its-credibility-with-new-pregnancy-guidelines/2SCHzNCqcWNDRguol7kzwK/story.html>

Week 2. Introduction to Science and Technology Studies Approaches: Sociology of Science as Culture

Bourdieu, Pierre. 2004. "The Specificity of the Scientific Field and the Social Conditions of the Progress of Reason" in *The Science Studies Reader*. New York: Routledge. 31-51.

Gieryn, Thomas F. 1999. "Contesting Credibility Cartographically" in *Cultural Boundaries of Science: Credibility on the Line*. Chicago: University of Chicago Press. 27-64.

Week 3. Introduction to Science and Technology Studies Approaches: Actors, Actants, and Networks

Latour, Bruno. 2005. *Reassembling the social: an introduction to actor-network-theory*. Oxford; New York: Oxford University Press. Introduction and Part One.

Week 4. Introduction to Science and Technology Studies Approaches: Biopower and Biosociality

Foucault, Michel. 1978. *The History of Sexuality*. Vol. 1. New York: Random House. Part Five.

Rabinow, Paul. 1996. "Anthropology of the Actual" in *Anthropos Today*. Princeton, NJ: Princeton University Press. 55-67.

Hacking, Ian. 1999. "Making Up People" in *The Science Studies Reader*. New York: Routledge. 161-71.

Week 5. Introduction to Science and Technology Studies Approaches: Biopolitics in the Twenty-first Century

- Epstein, Steven. 2007. *Inclusion: The Politics of Difference in Medical Research*. University of Chicago Press. How to Study a Biopolitical Paradigm.
- Rose, Nikolas. 2007. *The Politics of Life Itself: Biomedicine, Power, and Subjectivity in the Twenty-First Century*. Princeton, NJ: Princeton University Press. Chapters 1-5.

Week 6. Racial Conceptualization

- Morning, Ann. 2011. *The Nature of Race: How Scientists Think and Teach about Human Difference*. UC Press.

Week 7. Racial Bioscience

- Nelson, Alondra. 2015. *The Social Life of DNA: Race, Reparations, and Reconciliation After the Genome*. Boston, MA: Beacon Press.
- Bliss, Catherine. 2012. *Race Decoded*. Stanford, CA: Stanford University Press.

Week 8. Racial Innovations

- Benjamin, Ruha. 2019. *Race After Technology*. London: Polity Press. Introduction.
- Srinivasan, Ramesh. 2020. *Beyond the Valley*. Cambridge, MA: MIT Press. Introduction and Part One.

Week 9. The Science of Sex

- Fausto-Sterling, Anne. *Sexing the Body*. 2000. New York: Basic Books. Chapters 1-3.
- Jordan-Young, Rebecca. 2010. *Brain Storm: The Flaws in the Science of Sex Differences*. Cambridge, MA: Harvard University Press. Chapters 1-5.

Week 10. Making Sex, Making Gender

- Richardson, Sarah S. 2013. *Sex Itself: The Search for Male and Female in the Human Genome*. University of Chicago Press. Chapters 1, 9, and 10.
- Almeling, Rene. 2011. *Sex Cells: The Medical Market for Eggs and Sperm*. 1 edition. University of California Press. Introduction and Chapters 3-5.

Week 11. Capitalism in Postcolonial, Postgenomic Times

- Rajan, Kaushik Sunder. 2006. *Biocapital: The Constitution of Postgenomic Life*. Duke University Press Books.

Week 12. Global Inequalities

- Rudrappa, Sharmila. 2015. *Discounted Life: The Price of Global Surrogacy in India*. NYU Press.

Week 13. Science and Technology Studies Approaches in a Global Context

- Biehl, Joao and Amy Moran-Thomas. 2009. "Symptom: Subjectivities, Social Ills, Technologies." *Annual Review of Anthropology* 38: 267-288.
- Raman, Sujatha and Richard Tutton. 2009. "Life, Science, and Biopower." *Science, Technology, and Human Values* 1-24.