This seminar examines the role of science and technology in the politics of contemporary
societies, especially the United States. The central aim of the course is to consider the following
question: *To what extent and in what ways are normative choices embedded in the social and
technological machinery through which we produce knowledge about the world, create new
systems and artifacts, integrate knowledge and technology into society, anticipate and imagine
possible futures, and constitute sociotechnical orders?* The course will explore this broad
question in specific contexts including biotechnology, medicine and public health, information
technology, and energy and the environment. Among the themes we will consider are the politics
of risk, vulnerability, and disaster; the politics of expert advice to government; the politics of
numbers; the politics of standardization and standard setting; the politics of surveillance
technologies; the politics of human nature; and the politics of imagining and forecasting the
future. The course will emphasize close reading of texts and will be highly participatory, with
students actively leading discussions of selected readings. Students will be expected to complete
approximately 30 double-spaced pages of written work. Limited to 15 students.

Prerequisites: At least one course in Science & Technology Studies. This course is intended for
seniors and well-prepared juniors.

Readings

The following books are available at the Cornell Store:

  Columbia University Press.
  NY: Cornell University Press.
- Course Packet for STS 4771.

The full text of Porter’s *Trust in Numbers* is also available free from the Cornell Libraries online
as an e-book. Beck, Lampland and Star, and Perrow are also on 2-hour Reserve at Uris Library.
Journal articles listed in the syllabus are available online (often through the Cornell Libraries –
you will need to use Passkey from off-campus computers) and, in some cases, via the clickable links provided in the online version of the syllabus.

Requirements and Evaluation

- **Participation.** This course will be a highly participatory one, with all students expected to complete assigned readings in advance of class and to contribute to discussions informed by the readings. 30%

- **Presentations.** Each week, several students will be expected to make presentations on assigned readings to help launch discussion. Each student will have a number of opportunities to present during the semester. The overall quality of these presentations will constitute 10% of the grade. 10%

- **Postings to course website.** Students will also post comments and topics for discussion on the course website and complete written assignments described below. These postings should succinctly identify issues and questions raised by the readings, laying out the topic in a paragraph or so. These comments should not simply summarize readings but should critically reflect on major arguments, theoretical and empirical questions, methodological issues, and directions for additional research. Students are expected to post at least 12 times during the semester, or about once per week. To be counted, postings must be uploaded by 8 pm on the day before the reading will be discussed. Posting will begin on September 8 and end on December 1. 10%

- **Replies to online posts.** Students are expected to reply to the postings of other students occasionally with constructive comments, answers to questions, or alternative perspectives. Posts and replies will not be anonymous. Please maintain a polite, academic mode of discourse. 5%

- **Short assignments.** Three short assignments (3 to 4 pages) are required. 15%

- **Papers.** Two longer papers will be assigned. Paper 1 (~ 6 pages) is due on October 6. Paper 2 (8 – 10 pages) is due on Friday, December 2. Each paper will count for 15% of the grade. 30%

Outline of the Course

Introduction

August 25: Introductory Meeting
Part I: Controversies and Contested Boundaries

August 30: Controversies

✓ August 30 - Assignment 1 (due in class)

September 1: Jasanoff, “Contested boundaries”

Part II: Risk, Vulnerability, and Disaster

September 6: Fischhoff et al.; Wynne

✓ September 6 - Assignment 2 (due in class)

September 8: Perrow (selections)

✓ Friday, September 9: Sign up to attend office hrs week of Sept. 12 (20 min)

September 13: video: Meltdown at Three Mile Island (in class); Perrow (selections); Hilgartner, “Risk objects”

September 15: Lakoff (Introduction and chapters by Jasanoff and Roberts)

✓ Friday, September 16 - Assignment 3 (due in 304 Rockefeller by 6 pm)

Part III: Expert Advice, Science, and National Differences

September 20: Hilgartner, Science on Stage, chapter 2; Jasanoff, Designs on Nature, chapters 9 and 10

✓ September 21 - Paper 1 assignment to be posted

September 22: Bosk; Briggle; Testa

Part IV: Standards, Categories, Quantification

September 27: O’Connell; Hacking

September 29: Lampland and Star (chapters by Star and Lampland, Epstein)

October 4: Lampland and Star (chapters by Treas and Millerand and Bowker)
October 6: No class – Paper 1 due.

October 6 - Paper 1 due by 6 pm

October 11: Fall Break – no class

October 13: Reardon; Kahn

October 18: Porter (selections)

October 20: Porter (selections); Keating and Cambrosio

Part V: Futures and Anticipation

October 25: Van Lente and Rip; Fortun; Tutton

October 27: Jasanoff and Kim; MacKenzie and Spinardi; Gusterson

Part VI: Risk Revisited

November 1: Lezaun and Millo; Beck (selections)

November 3: video: Inside Job (in class); Beck (selections)

November 8: Beck; Lakoff (chapter by MacKenzie)

Part VII: Surveillance and Monitoring

November 10: video: Our Brand is Crisis (in class)

November 15: Daley; Haggerty and Ericson

November 17: Brunton and Nissenbaum; Mahajan

Part VIII: Public (Dis)engagement

November 22: Rowe and Frewer; Lezuan and Soneryd

November 24: Thanksgiving Day – no class

November 29: Hilgartner, “Intellectual property…”
December 1: Barben et al.

\checkmark December 2 - Paper 1 due by 6 pm

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Bibliography

Citations for course readings are given below. The boldfaced letter following each entry indicates how the reading can be obtained.

- CP = course packet
- CS = Cornell Store
- O = online
- R = on 2-hour reserve at Uris


Tutton, Richard. 2011. “Promising Pessimism: Reading the Futures to be Avoided in Biotech.” *Social Studies of Science*. O

