This course introduces students to methods in the history of science and technology, with attention to global and interdisciplinary perspectives. In addition to various historical approaches, readings may also include work in ethnography, feminist theory, postcolonial studies, Science & Technology Studies (STS), environmental studies, and other related fields. Particular emphasis will be placed on understandings of materials and material agency, as well as situating a range of themes central to modern science and technology—such as quantification, innovation, infrastructure, and information—within broader historical contexts.

This semester, our aim is to explore how histories of science and technology can be useful for scholars and professionals in a wide range of fields and with a wide range of interests. We will not aim for a comprehensive methodological overview of the historiography of science and technology, and we will definitely not aim for a comprehensive survey of the history of science and technology. Rather, we will explore a collection of themes and readings that showcase the kinds of questions that histories of science and technology can help you pose and answer. I am very much open to adjusting latter weeks of our syllabus in order to address topics that we're not currently covering, should any such topics be of strong interest to multiple seminar participants. Please ask!

This course is designed for graduate students in History, as well as graduate students in other fields of humanities and social sciences with interests in Science and Technology Studies (aka Science, Technology, and Society; aka STS). Natural science and engineering graduate students eager to explore historical perspectives on their fields are very welcome, as are advanced undergraduates with similar qualifications. Students should have a strong background in either a) the methods of History or an allied field of the social sciences or humanities, or b) substantial experience in science or engineering is. (Got all of the above? Fabulous! But that’s definitely not required.) Above all, you should be excited to do some serious reading, thinking, and discussing.

**Readings:** Each week, we will take up a topic of broad scope and (hopefully) broad-based interest through scholarship addressing this topic vis-à-vis science and technology. We will typically read one book and one or two articles per week. All required books will be available on reserve at the library, and digital versions of all other readings will be available via our course webpage.

**Attendance:** Attendance is vital... but things come up. Everyone gets one absence as a “personal day,” no questions asked. Beyond that, I’m happy to excuse absences due to illness or required University activities, with completion of a make-up exercise contributing to the following week’s discussion.
**Participation and Presentations:** Active participation in seminar discussions is required. Each week, two students will present brief (5 minute) contextual overviews of the week’s reading(s), one addressing historical subject matter, the other addressing historiographic, conceptual, and/or theoretical contributions. Each student will present one introduction of each sort during the term.

**Term Project:** As a term project (due on TBD), in groups of approximately three, students will develop an annotated syllabus for an original, semester-long lecture course addressing a topic in the history of science and technology (or otherwise informed by our readings and discussions). Each week’s thematic focus would be appropriate as a syllabus topic, although students may choose other topics or design surveys if they wish. As models, we will read and discuss a range of such syllabi in class. *Each group must discuss their syllabus topic and plans with the instructor before our class meeting on Nov 18.*

**Term Project Alternatives:** Students may petition the instructor to pursue one of the following alternative term projects (petitions due via email by 5pm on Friday, Oct 11):

a) an original research paper of approximately the length and scope of an academic journal article, structured around an episode in the history of science and/or technology;

b) an original dissertation proposal outlining a full-length research project engaging the methods discussed in this course. This must contain a discussion of existing literature, archives and sources to be consulted, the significance of your study, and the benefits of your proposed approach. (There is no expectation that you will actually select this as your dissertation topic!)

c) work of similar scope and intellectual rigor that will advance your scholarly interests.

**Grading:** *Participation 50% • Term proj. 30% • Presentations 10% • Just-being-you 10%*

**Required books:** (* = available as an e-book through Duke Libraries)


**Week 1 (Aug 26): Introduction**

- What does it mean to think historically about science and technology?
- What can histories of science and technology do for me?

**Week 2 (Sept 2): Progress**

Readings:

- Cowan, *More Work for Mother*.

Supplementary:


**Week 3 (Sept 9): Facts, alternative facts, and alternatives to facts**

Readings:

- Shapin and Schaffer, *Leviathan and the Air-Pump*.
Supplementary:


**Week 4 (Sept 16): Experts**

Readings:

- Mackenzie, *Inventing Accuracy*.

Supplementary:


**Week 5 (Sept 23): Nature**

- Daston and Park, *Wonders and the Order of Nature*.
- Latour, *We Have Never Been Modern*.

Supplementary:


**Week 6 (Sept 30): Bodies and disease**

Readings:

- Wailoo, *Dying in the City of the Blues*.

Supplementary:


**FALL BREAK (Oct 7)**

**Week 7 (Oct 14): Infrastructure and environment**


Supplementary:


**Week 8 (Oct 21): Uncertainty and perspective**

Readings:

- Murphy, *Sick Building Syndrome*.

Supplementary (uncertainty, perspective, and objectivity):


Supplementary (science, technology, and architecture):


**Week 9 (Oct 28): Commerce**

Readings:

- Cook, *Matters of Exchange*.

Supplementary:


**Week 10 (Nov 4): Labor, ontology, and agency**
Readings:

• Hecht, *Being Nuclear*.

Supplementary:


**Week 11 (Nov 11): Collections**
Readings:

• TallBear, *Native American DNA*.

Supplementary:

**Week 12 (Nov 18): Plants, animals, and politics**

Readings:

- Saraiva, *Fascist Pigs*.

Supplementary:


**Week 13 (Nov 25): Language**

Readings:


Supplementary readings:


**Additional topics (some partly addressed in our current readings)**

- Numbers and calculation
- Disaster
- Race
- Maintenance
- Disability
- Books
- Violence
- Data
- Gender and sexuality
- Risk
- Science and/as political ideology
- Science fiction
- Cyborgs
- Standards and measurement
- Classification
- Computing
- Policing the boundaries of science
- The future
- Pedagogy
- (Inter)nationalism & universalism
- Toxicity

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