

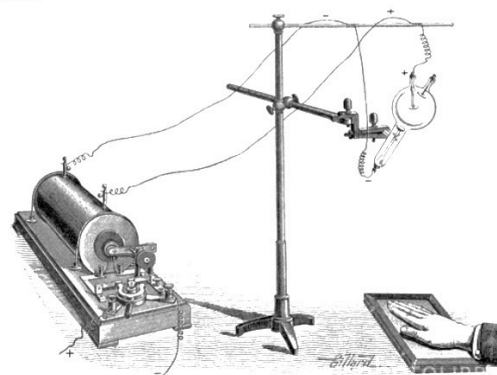
# HISTORY 150: TECHNOLOGY AND MEDICINE

SUMMER 2020

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Harvey Mudd College, HSA Department

**OFFICE HOURS:** Zoom appointments, please email to schedule

**CLASS:** Monday and Wednesday 6 – 9:15 pm; class time will be a mix of structured small group and full class discussion on Zoom and unstructured work time / drop-in office hours.



**COURSE OVERVIEW:** This course will explore the increasingly technological nature of medicine in the 19th and 20th centuries. The introduction of new medical technologies has often sparked anxiety. Patients and doctors have expressed concern over the efficacy and safety of new machines as well as the threat posed to patients' privacy and to patients' rights as bodies have come under increasing surveillance. Doctors have worried about the loss of their clinical skills and have questioned their ability to control and understand these new instruments. Scholars have asked what effect these technologies have had on the doctor-patient relationship, on changing concepts of disease and on constructions of race, gender, and ability. We will explore these questions through a series of historical case studies examining the history and use of the stethoscope, x-rays, and MRI, among others.

## GOALS:

By the end of this course students will:

- Be able to explain and connect key arguments made by historians, anthropologists, sociologists and media studies scholars
- Learn strategies for effectively leading a seminar discussion
- Produce a historical research paper making use of primary and secondary sources
- Connect historical themes and patterns to contemporary issues in medicine and public health

## EVALUATION:

Participation:

Pre-class work, Zoom discussion, peer review	25%
Seminar	10%
History Skills Paragraph (300 - 400 words)	5%
Midterm Paper (1500-1750 words)	15%
Contemporary Connections Reflection (750 - 1000 words)	10%
Research Paper	
Annotated Bibliography + Proposal	5%
Lightning Talk	5%
Final Paper (3000 – 3500 words)	25%

*You must complete all course requirements in order to pass the course.*

**Course Readings:** The course readings will all be available as pdfs on the Sakai site.

**Class Participation (25%)**

**Discussion of Readings (15%):** This is a seminar class, which means that I won't do much lecturing. We will approach the readings together through pre-class collaborative work and Zoom discussion. You are expected to contribute to these conversations each week. We have 18 readings and you must participate in pre-class and Zoom discussion of 14 readings in order to receive full credit.

**Peer Review (10%):** Peer feedback is a crucial part of the writing process and you will have the chance to give and receive feedback on each major writing assignment for the course.

**Seminar (10%):** You will each have the opportunity to lead our discussion of one of the readings (either individually or in pairs).

**History Skills Paragraph (5%):** (300 - 400 words) I will offer a list of possible topic sentences and you will write a paragraph using our class readings. This will give you a chance to practice drawing on historical evidence, quoting from sources, and providing proper citations before the midterm paper. *Due Friday, June 12 at 10pm.*

**Midterm Paper (15%):** (1500-1750 words) The midterm paper will provide an opportunity to engage more deeply with a selection of the texts that we have already discussed in class. *Due Friday, June 26 at 10pm.*

**Contemporary Connections Reflection (10%):** (750 – 1000 words) This paper will ask you to connect some of the readings from the second half of the course to a contemporary medical issue / experience. *Due Friday, July 10 at 10pm.*

**Research Paper (35%):** (3000 – 3500 words) You will write a research paper on any topic related to the course (subject to approval). A proposal (5%) is due *Friday, July 3 at 10 pm*. You will give a 2-3 minute presentation explaining one or two of your key findings (5%) during class *July 13 at 7pm*. You will bring a draft of your paper to class for peer review on *Wednesday, July 15* and the final paper (25%) is due *Monday, July 20 at 10pm*.

**Schedule of Readings and Major Deadlines**

For a more detailed schedule showing all tasks and weekly work, please click [here](#).

**June 8: Introduction**

Material Culture Exercise (in class)

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**June 10: Technological Determinism**

1. *Does Technology Drive History?* "Introduction," ix – xv, and "Technological Determinism in American Culture," 1-35.

2. Stanley Joel Reiser. "Revealing the Body's Whispers" in *Technological Medicine*, 1- 13.

Primary Source: Hyde Salter, "On the Stethoscope" *BMJ* (1863)

**Skills Paragraph due Friday, June 12 at 10 pm.**

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June 15: Measuring Instruments

3. Lundy Braun, *Breathing Race into the Machine* "Introduction," xii -xxiv, and "Black Lungs and White Lungs," 27 - 54.
4. Christopher Lawrence, "Incommunicable Knowledge: Science, Technology and the Clinical Art in Britain 1850 - 1914," 503-520.

Contemporary Connection: Ibram X. Kendi, "Stop Blaming Black People for Dying of the Coronavirus," *Atlantic* (April 14, 2020)

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June 17: Technology and Constructions of Illness

5. Carolyn de la Pena, "Powering the Intimate Body," in *The Body Electric*, 137-170.
6. Keith Wailoo, "Chlorosis Remembered," in *Drawing Blood*, 17-45

June 22: Hospitals and Scientific Management

7. Joel Howell, "Science, Scientific Systems and Technology," in *Technology in the Hospital*, 30-68.
  8. Thomas Schlich, "Negotiating Technologies in Surgery: The Controversy about Surgical Gloves in the 1890s," p. 180-197.
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June 24: X-Rays

9. Lisa Cartwright, "Decomposing the Body: X-Rays and Cinema," in *Screening the Body*, 107-142.
10. Rebecca Herzig, "Removing Roots: 'North America Hiroshima Maidens' and the x-ray," 723-745.

**Midterm Paper is due Friday June 26 at 10pm.**

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June 29: Screening

11. Keith Wailoo, "Detecting 'Negro Blood'," in *Drawing Blood*, 134-161.
  12. Jessica Martucci, "MSM, Identity, and Blood Policy in the Age of AIDS," 215 - 235.
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July 1: Birth Control

13. Harriet Washington, "Eugenic Control of African American Reproduction," 189-215.
14. Andrea Tone, "Searching for Something Better," in *Devices and Desires*, 261-283.

**Research Proposal and Annotated Bibliography due Friday, June July 3 at 10pm.**

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July 6: Popular Images of Technology

15. David Serlin, "Engineering Masculinity: Veterans and Prosthetics after WWII," 34-47.  
 16. Kelly Joyce, "Appealing Images: Magnetic Resonance Imaging and the Production of Authoritative Knowledge," 437 - 462.
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### July 8: Non-Western Medical Paradigms

17. Eunjeong Ma and Michael Lynch, "Constructing the East-West Boundary: The Contested Place of a Modern Imaging Technology in South Korea," p. 639 - 665.  
 18. Margaret Lock, "On Dying Twice: culture, technology and the determination of death," 233-262.

### **Contemporary Connections Reflection due Friday, July 10 at 10pm.**

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### July 13: Lightning Talks

#### July 15: Peer Review

Upload a completed draft of your research paper to the sakai forum marked, "Research Paper Drafts," no later than 5:45 pm.

### **Research Paper due Monday July 20 at 10pm.**

## Seminar Guidelines

You will each lead our discussion of a reading (either solo or with a partner). This assignment comes in several parts:

### **Pre-Class Work: Due Friday at 7pm for Monday Seminars and Monday at 7pm for Wednesday Seminars**

*Insert links to Part A, Part B and Part C in our shared detailed weekly schedule. Double check the settings to make sure all links, docs and slides are available to the whole class: History 150 §2 - Summer 2020.*

**A. Overview.** Prepare a 5-10 minute presentation to set up the historical context for the reading. This may include a timeline and/or a brief explanation of the technology being discussed. Do not try to summarize the reading. You can record yourself using a program like [Loom](#), or you can simply post a link to a set of google slides. If you don't record yourself, make sure you have written out what you would say for each slide in the "Notes" section for your classmates to read.

**B. Pre-Class Discussion of reading.** Prepare a set of discussion questions that will ensure that your classmates have a chance to talk about and explore the reading. For this and the Zoom discussion, I will be grading you on how successfully you have helped your classmates **draw out and analyse the main arguments made by the author(s)** and the **evidence** given for those arguments. You can use this [Pre-Class Discussion template](#) to start (make a copy to edit).

**C. Primary Source.** Find at least one relevant primary source to share with the class. Take a look at the advice in the [Preliminary Research](#) doc for places to look for primary sources. This might be a newspaper piece, a journal article, an advertisement or a set of pictures that sheds light on the issues being discussed. If you choose a textual source make sure that it is short enough to read in about 5-10 minutes. If it isn't clear from the link, please include the full bibliographic info for the source in our shared schedule. You can also indicate on the shared schedule which parts we should read.

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**D. Zoom Discussion (45 minutes).** You should make a lesson plan for these 45 minutes, mapping out the questions you want to ask. If you have a partner, make sure you each know which part of the discussion you will be leading. You may want to organize an activity or split the class into discussion groups but be careful of timing. I highly recommend that you prepare a set of main points that you hope to draw out of the reading so that you can steer the conversation if it starts to veer off track. Your lesson plan should give us a chance to do the following (in whatever order makes the most sense):

- discuss the primary source
- follow-up on any questions that arose during the pre-class discussion of the main reading (this is a good time to fill in gaps if we missed something big in the pre-class discussion)
- draw out links to other readings and themes in this class and/or current events and issues