Technology and American Medicine
HSHM S428/HIST S174J

Undergraduate Seminar
Summer 2025

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Office hours: In-person and via Zoom. Sign up via Calendly.

- Office hours are a time to introduce yourself one-on-one, ask questions about the course, discuss the material in further detail, talk about your plans for the assignments, etc. This time is for you, so please use it!

Course Description

This course explores the material culture of American medicine. From instruments like thermometers and scalpels to imaging tools like X-rays and MRIs to everyday aids like glasses, prosthetics and fitness tracking apps—technology suffuses medicine today. In this course, we will analyze particular technologies as both physical and cultural objects in historical context. In addition to investigating the definition of medical technology, we will also consider a range of themes and questions, among them: why do some technologies succeed and others fail? What is the relationship between medical technology and power? How do race, class, gender, and sexuality impact the creation and use of medical technology? We will pay particular attention to the themes of expertise, authority, and identity. In addition to reading primary and secondary sources, we will work closely with materials from the Medical Historical Library. Students can expect to emerge from the course prepared to analyze medical technologies and place them in historical context in American medicine. The course will culminate in a student-run exhibition of medical technologies.

Course Goals

- We will be valued members of a robust learning community.
- We will possess strengthened powers of attention and observation and will have expanded our capacity for joy.
- We will be able to critically reflect upon our relationship with medical technology.

- We will be able to discuss in detail a particular medical technology, analyze it from a material cultural perspective, and situate it socially and politically in its historic period.
- We will be able to communicate our historical findings to a broad audience.

Assignments & Assessment

This class will build progressively toward the completion of an exhibition of medical technologies chosen and researched by class participants. We will spend a significant amount of class time discussing this project and student progress throughout the semester. Further instructions on the individual components of this project will be provided in class.

Assessment components include the following. Requirements vary depending on which grade you are working toward:

A. Participation (20%)
The joy of a seminar is conversing with others about shared materials. Please come to class regularly, on time, and prepared to ask questions and offer relevant comments. Collectively, we will establish norms for our community and revisit them throughout the semester.

>> Goal: to develop membership in a robust learning community

B. Primary Source Analysis (20% - due session 3 - 3 pages)
Choose a medical instrument or device from the Medical Historical Library collections. Using the primary source analysis guide posted on Canvas, write a 750-word analysis of the technology, describing the object in detail and commenting on its function, use, primary context, purpose, and if applicable, any connections to a present-day medical technology. You may change your chosen technology between this assignment and the exhibit proposal.

>> Goal: to develop our observation and attention skills and capacity for joy

C. Exhibit Proposal (10% - due session 6 - 3 pages)
Write a 750-word synopsis of your proposed exhibit topic (does not have to be the same object you analyzed in the 1st assignment). What is the medical technology that you will pursue, and why? What are some of the major themes and questions it raises, and why it is significant? Are there additional objects or primary sources you hope to display with your medical technology in your final exhibit? Following your synopsis, provide at least

two secondary sources and one supplementary primary source that you will use to help support your research. We will spend time in class discussing appropriate primary and secondary sources and how to find them.

>> Goal: analyze a particular medical technology from a material cultural perspective, and situate it socially and politically in its historic period.

D. Exhibition (20% - during last class session)
Assuming the role of curator and historian of medical technology, students will produce a mini-exhibition consisting of a single object (your medical technology), artifact labels, and one explanatory panel written in the style of a museum exhibit (roughly 200 words). Students may include supplementary primary sources or artifacts if relevant.

>> Goal: analyze a particular medical technology and communicate historical findings to a broad audience.

E. Museum Talk (30% - during last class):
Using your newfound expertise, deliver a 5-minute curator talk that presents your argument and evidence in more detail.

>> Goal: analyze a particular medical technology and communicate historical findings to a broad audience.

Course Calendar

Session 1 – Introduction to Material Culture

1. Jules David Prown, “Mind in Matter: An Introduction to Material Culture Theory and Method.” *Winterthur Portfolio* 17, no. 1 (1982): 1-19.
2. Margarete Sandelowski, “Object Lessons,” *Devices and Desires: Gender, Technology, and American Nursing* (University of North Carolina Press, 2000): 21-43.
3. Watch: *This is Not a Chair* (2013)

Session 2 - Old, New & Political Technology

1. Langdon Winner, “Do Artifacts Have Politics?” in *The Whale and the Reactor: A Search for Limits in an Age of High Technology* (University of Chicago Press, 1988): 19-39
2. David Edgerton, Chapter 1, *The Shock of the Old: Technology and Global History since 1900* (Profile Books, 2006): 27-52.

Session 3 - Racial Technologies

1. Lundy Braun, “Spirometry, Measurement, and Race in the Nineteenth Century,” Journal of the History of Medicine and Allied Sciences 60, no. 2 (2005): 135-159.
2. Watch: Ruja Benjamin & Dorothy Roberts, “Policing without the Police: Race Technology and the New Jim Code” (Haymarket Books, YouTube)

Session 4 - Blood Tech

1. Keith Wailoo, “Detecting ‘Negro Blood’: Black and White Identities and the Reconstruction of Sickle Cell Anemia,” in *Drawing Blood: Technology and Disease Identity in Twentieth-Century America* (1997): 134-161.
2. Thomas A. Guglielmo, "Red Cross, Double Cross": Race and America’s World War II-Era Blood Donor Service, *The Journal of American History*, Vol. 97, No. 1 (June 2010): 63-90

Session 5 - “Aids” and (Dis)Ability

Selections from Jaipreet Virdi, *Hearing Happiness: Deafness Cures in History* (University of Chicago Press, 2020):

1. Introduction: “Cures of Yesterday,” 1-34
2. Chapter 1: “Improbable Miracles,” 35-72
3. Epilogue: “Beyond Eyes of Incredulity, 247-268

Session 6 – Imaging Technologies

(Note: we’ll be traveling as a class to the Dept of Radiology)

1. Joel Howell, “The X-Ray Image: Meaning, Gender, and Power,” *Technology in the Hospital: Transforming Patient Care in the Early Twentieth Century* (Johns Hopkins University Press, 1995): 133-168.
2. Jose van Dijck, “Mediated Bodies and the Ideal of Transparency,” *The Transparent Body: A Cultural Analysis of Medical Imaging Technologies* (2005): 3-16.
3. Lara Freidenfelds, “Seeing the Baby: The Ultrasound Ritual,” *The Myth of the Perfect Pregnancy: A History of Miscarriage in America* (New York: Oxford University Press, 2020): 152-65.

Session 7 – Maternal Technologies

1. Jessica Martucci, “Woman’s Right, Mother’s Milk: The Nature and Technology of Breast Milk Feeding,” *Back to the Breast: Natural Motherhood and Breastfeeding in America*
2. Rima Apple, “‘Follow the Lead of Physicians’”: Motherhood in the Late-Nineteenth Century,” *Perfect Motherhood: Science and Childrearing in America* (2006): 11-33
3. Selections from Valerie Fildes, *Breasts, Bottles, and Babies: A History of Infant Feeding* (Edinburg University Press, 1986)
4. Michelle Millar Fisher & Amber Winick, *Designing Motherhood: Things that Make and Break Our Births*: 10-24 & 157-161 & 253-267.

Session 8 – DIY Tech, Guest: Dr. Megann Licskai

1. Stephania Taladrid, “The Post-Roe Abortion Underground,” *The New Yorker*, October 17, 2022
2. Kathryn J. LaRoche and Angel M. Foster, ‘‘It gives you autonomy over your own choices”: A qualitative study of Canadian abortion patients’ experiences with mifepristone and misoprostol,” *Contraception* 102 (2020): 61-65.
3. Michelle Murphy, “Traveling Technology and a Device for Not Performing Abortions,” *Seizing the Means of Reproduction* (Duke University Press, 2012): 151-176.

Primary sources

4. Suzann Gage, “When Birth Control Fails: How to Abort Ourselves Safely,” Speculum Press 1979
5. Do It Yourself abortion flier, *WHAM!* Collection

Session 9 – Hospitals & Mediated Intimacy

1. Charles Rosenberg, “The Promise of Healing: Science in the Hospital,” The Care of Strangers: The Rise of America’s Hospital System (1987): 142-165.
2. Kelly Underman, “The Context of Touch: Gloves and the Pelvic Exam,” in Nott, J., & Harris, A. editors, *Making Sense of Medicine: Material Culture and the Reproduction of Medical Knowledge* (Bristol, England: Intellect, 2022): 187-192.
3. Hughes Evans, “Losing Touch: The Controversy over the Introduction of Blood Pressure Instruments into Medicine,” *Technology and Culture*, Vol. 34, No. 4 (Oct., 1993): 784-807.

Session 10 - Workshop and Exhibit!

Come to class prepared to finalize your labels. We’ll print and mount your exhibit!

Additional Details

Attendance & Deadlines
If something else is making it difficult for you to meet the course requirements, please let me know right away. I will always try to offer you as much flexibility as possible.

It is possible to make up for missed labor due to illness. When a student notifies me ahead of class that they are unwell, they can make up no more than one class by reviewing the class notes, finding time to visit the materials from the library on your own (email historical.library@yale.edu) or at least reviewing the digitized version from the collections, submitting a short object analysis (~300 words) and submitting some reactions to the readings on the optional discussion board (which I will also link to on the modules). Students will notify me when this labor is complete.

Accommodations
I welcome students of all abilities and learning styles in my courses. Please let me know as soon as possible if you have accessibility needs via the Get to Know You Form. I will do my very best to address them. I encourage you to visit Student Accessibility Services to determine how you could improve your learning as well. If you need official accommodations, you have a right to have these met. There is also a range of resources on campus, including the Writing Center, Residential College Tutors, and Academic Strategies.

Communication
I aim to answer weekday emails within 24 hours (M-F).

Academic Integrity & Support
Strong historical thinking and writing draws from and builds on the ideas of others. This course is designed to help you develop your analytic and writing abilities in the discipline of history. It is imperative you produce your own work and recognize the people whose ideas you are building on. If you have any questions about how to do this, I am happy to discuss this in class or in office hours.

Inserting AI-generated text into an assignment without proper attribution is a violation of academic integrity. You are welcome to experiment with AI programs in this class; however, do so at your own risk. If you plan to use AI in developing any part of your

assignments, please email me beforehand with a note about how you plan to do so and why. Be sure to cite the technology correctly, including the prompt you submitted, the date you accessed it, and the URL of the program. AI is often wrong in surprising ways. As anthropologist Lisa Messeri wrote, “[AI bots] proclaim with authority despite knowing nothing…[T]hey proffer results that are precise but inaccurate.”[1]

For the full Yale College policy see:
https://catalog.yale.edu/undergraduate-regulations/regulations/academic-dishonesty/

[1] Lisa Messeri (2023) Teaching with ChatGPT: Critiquing GenerativeArtificial Intelligence from the Classroom, Anthropology Now, 15:1, 84-92, DOI:10.1080/19428200.2023.2230098