

HISTORY OF TECHNOLOGY, ENVIRONMENT, & HEALTH

Graduate Seminar

History 26: 510: 598

FALL 2008 SYLLABUS

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Class Meetings

Cullimore Hall 307

Thursdays 5-7:30 p.m.

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Office Hours

Mondays & Thursdays by appointment

This course provides an introduction to the histories of technology, environment, health and medicine while examining some of the diverse strategies that historians in these fields are currently using to make sense of the past. We will explore what is distinctive about these fields of history, as well as what it means to engage in the historical study of technology, health, medicine, science, and the environment. How, for example, do historians of technology, environment, and health interpret society, culture, and politics? What assumptions and approaches do they share with the social historian, the cultural historian, the political historian, or the student of global history? How, for instance, do historians of technology, environment, and health treat matters of class, race, and gender? And how have these historians employed the theories and methods of other scholarly disciplines in their work, including the insights of anthropologists, biologists, philosophers, political activists, and sociologists. As these questions suggest, the principle goal of the course is to introduce the student of history to some of the vital ideas, scholarly trends, and methods that inform our efforts to gain historical perspective on matters of technology, environment, medicine, and/or health.

Requirements:

Readings

Weekly reading assignments are outlined below. Before coming to class, you should familiarize yourself with the factual content of the readings as well as the author's argument and his or her use of sources. In class, I will encourage you to think critically about the theoretical and methodological issues raised in the readings. This goal will only be attainable if you come prepared.

Books for the course can be purchased through the Rutgers University Bookstore (Barnes & Noble). Their contact information: Phone: 973-353-5377; Fax: 973-353-1623; Email: sm409@bncollege.com. Copies of the assigned articles will be available online through the Dana library electronic reserve system. Full citations for the books and articles appear in the attached bibliography at the end of this syllabus.

Attendance and Class Participation

Class participation should involve active listening and engagement. Attendance is both expected and required.

Discussion Responsibility

During the first class, I will outline discussion responsibilities for the semester. I will ask each student to take responsibility for presenting an assigned reading to the class. On days that you are responsible for a reading, you should prepare notes that foster critical discussion rather than a mere restatement of the reading material. Areas you might want to focus class discussion include: the author's argument/s, the author's use of sources, his or her methodology, how the weekly reading on theory relates to this methodology, the organization of the book and whether or not it works successfully, and how the readings for that week relate to the other material you have learned.

Final Paper

You will write a final paper of 15-25 pages in length. For this paper you will select a primary document of interest to you that also concerns a subject of relevance to the history of technology, environment, and/or health. I will ask you to do a close historical "reading" of that document in your paper. This historic document can be a conventional text such as an environmental law, a government report, a scientific journal article, or a transcription from an oral interview. It might also be a less conventional text, including a technological landscape, a novelistic treatment of an illness or natural disaster, or even a nature or public health film. Your interpretation of your chosen document should place the source in its historical context as well as attempt to make an analytical argument about the document's historical meaning. In doing this, you will be asked to make explicit use a theoretical and/or methodological approach in your interpretation of the document. Preferably, you will use one of the theories and/or methods that we will

discuss in the course of the semester. Because you must select a document and have it approved by the sixth week of the course, you should begin thinking about this assignment during the early part of the semester. You will also present your paper project before the class during one of the last three meetings of the semester. As a class, we will use the presentations as an opportunity to discuss and critique individual progress on these final papers. The final paper is due on December 12.

The Stages toward the Final Paper: Primary Document Assignment, Annotated Bibliography, Project Description, and Project Presentation

The writing of your final paper will occur over the course of the semester. In order to facilitate the writing of the paper, I will ask you to do four tasks along the way. The first task is to identify your primary document and write a short document explaining its historical significance (October 16). The second task is to write an annotated bibliography that lists secondary source materials of relevance to your project (October 30). Because the final paper is not an extensive research paper, your list of secondary materials should be limited to four or five sources. The third task is to draft a project description that will form the basis of a rough draft for your project presentation and final paper (October 30). The fourth task is to present your project to the class between November 20 and December 4.

Assignment Due Dates

Week 7 (October 16): Primary Document

Week 9 (October 30): Project Description and Annotated Bibliography

Weeks 12-14 (November 20-December 4): Project Presentations

Final Paper Due December 12

Grading

15% for overall attendance & participation

20% for leading discussions of an assigned reading

15% for project presentations

50% for final paper (including the document, bibliography, and project description)

Consistent effort and improvement will be weighted heavily in grading

Semester Schedule

Week 1. (Sept. 4) Introduction to the Histories of Technology, Environment, & Health

Week 2. (Sept. 11) Seminal Explorations in the History of Technology, Environment, and Health I

Alfred Crosby, *The Columbian Exchange: The Biological and Cultural Consequences of 1492*

Jared Diamond, "The Worst Mistake in the History of the Human Race"

Week 3. (Sept. 18) Seminal Explorations in the History of Technology, Environment, and Health II

Charles Rosenberg, *The Cholera Years: The United States in 1832, 1849, and 1866*

Charles Rosenberg, "Framing Disease: Illness, Society, and History"

Charles Rosenberg, "Pathologies of Progress: The Idea of Civilization as Risk"

Week 4. (Sept. 25) Interpreting Technological "Progress"

Edward Tenner, *Why Things Bite Back: Technology and the Revenge of Unintended Consequences*

Robert L. Heilbroner, "Do Machines Make History?" and "Technological Determinism Revisited"

Merritt Roe Smith, "Technological Determinism in American Culture"

Week 5. (Oct. 2) Hybrid Histories I

Selections from Keith Wailoo, *Drawing Blood: Technology and Disease Identity in Twentieth Century America*

Steven Peitzman, "From Bright's Disease to End-Stage Renal Disease"

Thomas Hughes, "The Evolution of Large Technological Systems"

Ruth Schwartz Cowan, "The Consumption Junction: A Proposal for Research Strategies in the Sociology of Technology"

Week 6. (Oct. 9) Hybrid Histories II

Ruth Schwartz Cowan, *Heredity and Hope: The Case for Genetic Screening*

Week 7. (Oct. 16) Research in the fields of HTEH I

Due: Primary Document Assignment

Week 8. (Oct. 23) Hybrid Histories III

Philip Pauly, *Biologists and the Promise of American Life*

Week 9. (Oct. 30) Research in the fields of HTEH II

Due: Project Description & Annotated Bibliography

Week 10. (Nov. 6) Grounding Historical Practice I

Daniel Lord Smail, *On Deep History and the Brain*, Preface through Chapter 3.

Week 11. (Nov. 13) Grounding Historical Practice II

Daniel Lord Smail, *On Deep History and the Brain*, Chapter 4 through Epilogue

Week 12. (Nov. 20) Project Presentations

Week 13. (Nov. 25) Project Presentations

Week 14. (Dec. 4) Project Presentations

Final Paper Due: Friday, December 12

Course Bibliography

Books (to Borrow or Purchase)

- Ruth Schwartz Cowan, *Heredity and Hope: The Case for Genetic Screening* (Harvard University Press, 2008)
- Alfred Crosby, *The Columbian Exchange: The Biological and Cultural Consequences of 1492* (Praeger Paperback, 30th Anniversary edition, 2003)
- Philip Pauly, *Biologists and the Promise of American Life* (Princeton University Press, 2000)
- Charles Rosenberg, *The Cholera Years: The United States in 1832, 1849, and 1866* (University of Chicago Press, 1987)
- Daniel Lord Smail, *On Deep History and the Brain* (University of California Press, 2008)
- Edward Tenner, *Why Things Bite Back: Technology and the Revenge of Unintended Consequences* (Vintage Books, 1996)
- Keith Wailoo, *Drawing Blood: Technology and Disease Identity in Twentieth Century America* (Johns Hopkins University Press, 1997)

Journal Articles or Book Chapters (on Electronic Reserve)

- Ruth Schwartz Cowan, "The Consumption Junction: A Proposal for Research Strategies in the Sociology of Technology," in Bijker, Hughes, and Pinch, eds., *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology* (MIT Press, 1987), 261-280.
- Jared Diamond, "The Worst Mistake in the History of the Human Race," *Discover* (May 1987) 8: 64-66.
- Robert L. Heilbroner, "Do Machines Make History?" and "Technological Determinism Revisited" in Merritt Roe Smith and Leo Marx, ed. *Does Technology Drive History? The Dilemma of Technological Determinism* (MIT Press, 1994), 53-78.
- Thomas Hughes, "The Evolution of Large Technological Systems," in Wiebe E. Bijker, Thomas P. Hughes, and Trevor J. Pinch, eds., *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology* (MIT Press, 1987), 51-82.
- Charles Rosenberg, "Framing Disease: Illness, Society, and History," in Charles Rosenberg and Janet Golden, eds., *Framing Disease: Studies in Cultural History* (Rutgers University Press, 1992), xii-xxvi.
- Charles Rosenberg, "Pathologies of Progress: The Idea of Civilization as Risk," *Bulletin of the History of Medicine* (1998) 72: 714-730.
- Steven Peitzman, "From Bright's Disease to End-Stage Renal Disease," in Charles Rosenberg and Janet Golden, eds., *Framing Disease: Studies in Cultural History* (Rutgers University Press, 1992), 3-19.
- Merritt Roe Smith, "Technological Determinism in American Culture" in Merritt Roe Smith and Leo Marx, ed. *Does Technology Drive History? The Dilemma of Technological Determinism* (MIT Press, 1994), 1-35.