

HISTORY OF TECHNOLOGY, ENVIRONMENT, AND MEDICINE: THEORY AND METHOD

Rutgers, Newark: Spring 2007
Graduate Course: History 598
Location: Conklin 324
Time: Thursday 5:00-7:30 PM

Instructor:

Professor Neil Maher
Federated Department of History
NJIT—Rutgers University, Newark

Office Hours:

Tuesdays, 2:00-4:00 p.m., Cullimore (NJIT), Room 325
Thursdays, 2:00-4:00 p.m., Conklin (Rutgers), Room 308
And by appointment

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COURSE DESCRIPTION:

The goals of this course are threefold. We will begin the semester with a four week introduction to the three fields under consideration — the history of technology, environmental history, and the history of medicine and health— and then dedicate the rest of the semester to reading innovative works that attempt to bridge these three areas of historical study. Second, we will explore various methodologies including social, political, cultural, and narrative history as well as historical categories such as race, class, gender, consumption, and the body to better understand how these historians research and write history. Finally, the class will examine several theoretical approaches used by these historians in their effort to conceptualize this complex relationship between the history of technology, environmental history, and the history of medicine and health.

REQUIREMENTS:

Attendance and Class Participation: Attendance in graduate classes is required — no unexcused absences will be tolerated. Class participation should involve active listening and engagement — more than simply showing up, and more than sheer volume of oral output.

Readings: Weekly reading assignments will average one book and one article per week, so plan accordingly. In general, the book will emphasize an important aspect of the

history of technology, environment, and medicine while the article will discuss theory and/or method in historical research. While I do not expect you to read every word, you should understand and be comfortable discussing the factual content of the work as well as the author's argument and his or her use of sources. You should also be able to think critically about the theoretical and methodological issues raised by the readings. Please try to purchase the books for the class; all are available at New Jersey Books, which is located at the corner of University and Bleeker (it is cheaper than the Rutgers Bookstore). The assigned articles are available online through the DANA library reserve desk.

Source Analysis Paper:

Before spring break, you will be asked to write one short paper (3 pages in length) that examines methodology and/or theoretical approaches for one of the books on our reading list. You may choose which book to examine, and will hand in the paper prior to class discussion for that book. These papers should not simply list the sources or explain the theory used by the historian in question. Instead you should strive to be analytical, to critically examine the methodology and/or theory used by the author. These papers should help jump-start you on your final paper.

Final Research Paper: You will also be asked to write a final paper approximately 15 pages in length. For this paper you may choose from two different assignments:

Methodology Assignment:

If you are more interested in exploring historical methodology, at the end of the semester you will undertake a paper involving primary research. For this assignment, you will first select between 3 and 5 primary historic documents of your choosing. You will then use these primary texts to write a paper that reflects a particular historical methodology, such as social history, cultural history, or political history. While I do not expect you to conduct substantial secondary research for this paper, you should examine one secondary source that contextualizes your primary texts. You will then use these two sets of sources to write a history that reflects a particular methodology.

Theory Assignment:

If you are more interested in theoretical approaches to history, you will instead select one primary document of interest to you from the field of the history of technology, environmental history, and/or the history of medicine and health. You will then use one of the theories we discuss during the semester to conduct a close historical "reading" of your chosen document. Your primary text can be as formal as an environmental law or a medical report or as informal as a technological landscape or even a nature film. Your "reading" of this document should both rely on the theory you have chosen from our reading list as well as make an analytical argument about the document's historic significance. Here too, you will be asked to find one secondary source that helps you place your primary text into its historic context.

Primary Document Approval: At our week 6 meeting (February 22) you will submit a short description and photocopy (if possible) of the primary document(s) that you are considering using for your final paper. This will force you to begin thinking about your

final paper early in the semester, and give me the opportunity to provide you with feedback on your project.

Project Proposal: When you get back from spring break (week 10) you will be asked to submit a short project proposal. In this proposal you should include: a one-paragraph description of your overall paper topic; a defense of your choice of primary documents, and a one-paragraph description of how your secondary source will help you with this final paper. If you are undertaking the methodology assignment, you will also submit a one-paragraph explanation of the historical method you will employ. If you are undertaking the theory assignment, you will do the same regarding the theoretical approach you will engage.

Paper Outline: To help organize and conceptualize your final paper, you will also be asked to submit a detailed outline of your project during week 12 of the semester. I will explain later in the semester what I expect from this paper outline assignment.

ASSIGNMENT DATES:

Week 6 (February 22): Primary Document Approval

Week 10 (March 22): Project Proposal

Week 12 (April 5): Paper Outline

Week 16 (Thursday, May 3): Final Paper

GRADING:

Attendance and Participation: 50%

Final Paper (including Source Analysis, Project Proposal, Paper Outline): 50%

Consistent effort and improvement will be weighted heavily in grading.

REQUIRED TEXTS:

Donald Worster, *Dust Bowl: The Southern Plains in the 1930s* (Oxford University Press, 1979)

Charles Rosenberg, *The Cholera Years: The United States in 1832, 1849, and 1866* (Chicago University Press, 1962)

Merritt Roe Smith, *Harpers Ferry Armory and the New Technology: The Challenge of Change* (Cornell University Press, 1977)

William Cronon, *Changes in the Land: Indians, Colonists, and the Ecology of New England* (Hill and Wang: 1983)

Laurel Thatcher Ulrich, *A Midwife's Tale: The Life of Martha Ballard, Based on Her Diary, 1785-1812* (Random House, 1990)

David Nye, *American Technological Sublime* (MIT Press, 1994)

Keith Wailoo, *Drawing Blood: Technology and Disease in Twentieth-Century America* (Johns Hopkins University Press, 1997)

Richard White, *Organic Machine: The Remaking of the Columbia River* (Hill and Wang, 1995)

Michelle Murphy, *Sick Building Syndrome and the Problem of Uncertainty: Environmental Politics, Technoscience, and Women Workers* (Duke University Press, 2006)

Eric Schlosser, *Fast Food Nation* (Harper Perennial, 2005)

Copies of the assigned articles are available on-line through the DANA library reserve desk.

WEEKLY ASSIGNMENTS:

PART I: INTRODUCTIONS

WEEK 1: WHAT ARE THEORY AND METHOD? (January 18)

No Required Reading:

WEEK 2: DEFINING ENVIRONMENTAL HISTORY (January 25)

Required Reading:

Donald Worster, *Dust Bowl: The Southern Plains in the 1930s*

Mart Stewart, "Environmental History: Profile of a Developing Field,"
The History Teacher 31 (May 1998): 350-368.

WEEK 3: IDENTIFYING THE HISTORY OF HEALTH (February 1)

Required Reading:

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

Brandt, Allan, "Emerging Themes in the History of Medicine," *Milbank Quarterly*, 69, no. 2 (1991) p. 199-214.

WEEK 4: LOCATING THE HISTORY OF TECHNOLOGY (February 8)

Required Reading:

Merritt Roe Smith, *Harpers Ferry Armory and the New Technology: The Challenge of Change*

Jeffrey Stine and Joel Tarr, "At the Intersections of Histories: Technology and the Environment," *Technology and Culture* 39 (October 1998): 601-640.

PART II: CROSSING BOUNDARIES

WEEK 5: BOTTOM UP HISTORY (February 15)

Required Reading:

William Cronon, *Changes in the Land: Indians, Colonists, and the Ecology of New England*

Thomas Bender, "Wholes and Parts: The Need for Synthesis in American History," *Journal of American History*, Vol. 73, no. 1, 120-136.

Nell Irvin Painter, "Bias and Synthesis in History," *Journal of American History*, vol. 74, no. 1 (June 1987), 109-112.

WEEK 6: GENDER AND NARRATIVE (February 22)

Required Reading:

Laurel Thatcher Ulrich, *A Midwife's Tale: The Life of Martha Ballard, Based on Her Diary, 1785-1812*

Joan W. Scott, "Gender: A Useful Category of Historical Analysis," *The American Historical Review*, Vol. 91, No. 5. (Dec., 1986), pp. 1053-1075.

Assignment Due: Primary Document Approval

WEEK 7: CULTURE (March 1)

Required Reading:

David Nye, *American Technological Sublime*

Lawrence Levine, "The Folklore of Industrial Society: Popular Culture and Its Audiences," *American Historical Review*, vol. 97, no. 5 (December 1992): 1369-1399.

WEEK 8: RACE (March 8)

Required Reading:

Keith Wailoo, *Drawing Blood: Technology and Disease in Twentieth-Century America*

Charles Rosenberg, "Framing Disease: Illness, Society, and History," in Charles Rosenberg and Janet Golden, eds., *Framing Disease: Studies in Cultural History*, xii-xxvi.

WEEK 9: SPRING BREAK (March 15)

WEEK 10: BODILY LABOR (March 22)

Required Reading:

Richard White, *Organic Machine: The Remaking of the Columbia River*

Arthur McEvoy, "Toward an Interactive Theory of Nature and Culture: Ecology, Production, and Cognition in the California Fishing Industry," *Environmental Review*, vol. 11, no. 4 (Winter 1987): 289-305

Assignment Due: Project Proposal

WEEK 11: POLITICS (March 29)

Required Reading:

Michelle Murphy, *Sick Building Syndrome and the Problem of Uncertainty: Environmental Politics, Technoscience, and Women Workers*

Heilbroner, "Do Machines Make History?," in Merrit Roe Smith and Leo Marx, eds., *Does Technology Drive History: The Dilemma of Technological Determinism*

Langdon Winner, "Do Artifacts Have Politics?," *The Whale and the Reactor: A Search for Limits in an Age of High Technology* (University of Chicago Press, 1986): 19-39.

WEEK 12: CONSUMPTION (April 5)

Required Reading:

Eric Schlosser, *Fast Food Nation*

Matt Klinge, "Spaces of Consumption in Environmental History," *History and Theory*, vol. 42, no. 4 (December 2003): 94-110.

Assignment Due: Paper Outline

PART III: PAPER WORKSHOP

WEEK 13: PAPER WORKSHOP #1 (April 12)

Required Reading:

Each other's outlines and rough drafts

WEEK 14: PAPER WORKSHOP #2 (April 19)

Required Reading:

Each other's outlines and rough drafts

WEEK 15: PAPER WORKSHOP #3 (April 26)

Required Reading:

Each other's outlines and rough drafts