

HIST 4067

HISTORY OF AMERICAN TECHNOLOGY

Fall 2006
MWF 11:15am-12:05pm
LeConte Hall, Room 101

Professor Shane Hamilton
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Office Hours: M&W, 2:30-4pm

COURSE DESCRIPTION

This course considers the ways in which technology has interacted with American society from colonial times to the present. We will explore technology as a central organizing theme in American history, rather than viewing technology as an "outside" or revolutionary force. Students will be expected to learn to ask critical questions of both technological development and the broader American culture of which it is a part. Topics will include the transition from an agrarian to an industrial economy; the role of the military and the state in technological change; changing patterns of work, leisure, gender, and class; the implications of mass production and mass consumption; and cultural conceptions of technological change.

COURSE REQUIREMENTS

Attendance

Attendance at *every* class meeting is mandatory. All absences are considered unexcused. In other words, there is no such thing as an excused absence, for any reason whatsoever. After your third absence from class, I will deduct *one percentage point* from your final course grade for each subsequent absence.

Reading and Discussions

Required readings are listed below. Students are expected to prepare for discussions (which will normally take place on Fridays) by reading the assigned materials and by writing formal response essays (see below). Active participation in the discussions is required.

Writing Assignments

There will be three kinds of writing assignments in this course, each of which will help you improve your reading, critical thinking, and writing skills.

Reading Responses: Each student will write **three** short (1-page, double-spaced, 1" margins, 12pt. font) **critical** responses to selected assigned readings. (Further instructions and a sample response are available on WebCT.) These responses must be uploaded to WebCT by 10pm the night before discussion (i.e., 10pm Thursday night) so that I can incorporate them into Friday discussion.

Short Essay: Each student will also write a short essay (3-4 page, double-spaced, 1" margins, 12pt. font) on an assigned topic related to the readings from the first third of the course. More information is available on WebCT.

Research Paper: Finally, each student will write an original essay (5-7 pages, double spaced, 1" margins, 12 pt. font) on an assigned research topic, using secondary and primary documents. Further instructions are available on WebCT.

Exams

There will be two exams: one in-class midterm and a comprehensive final exam. These will take the form of a combination of short-answer identifications and analytical essays. You are responsible for providing your own blue books for each exam (they are for sale at the bookstore).

Note on Requirements

Please note that the course syllabus is a general plan for the course. Deviations announced to the class by the instructor may be necessary. This means that course readings and requirements are subject to change at the professor's discretion.

Academic Integrity

All academic work must meet the standards contained in "A Culture of Honesty." Each student is responsible to inform themselves about those standards before performing any academic work. In short, do not plagiarize. Any infringement of the University's Academic Honesty Code—no matter how minor—will result in an automatic "0" (zero). Visit the following website for more information: http://www.uga.edu/ovpi/academic_honesty/academic_honesty.htm

GRADING

Discussion participation (including written responses)	15%
Essay 1	15%
Midterm examination	20%
Essay 2	20%
Final examination	30%

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COURSE READINGS

The following books are required reading, and will be available for purchase at the UGA Bookstore, or may be purchased online (but be sure to order the correct edition). One copy of each of the books will also be placed on Course Reserve in the Main Library. Students will also read primary and secondary documents (marked in the schedule by an asterisk [*]) which are available on the course website. If you provide me with a CD-R, I will burn all of the additional readings to the disc as PDFs.

Ruth Schwartz Cowan, *A Social History of American Technology* (New York: Oxford University Press, 1997)

Patrick Malone, *The Skulking Way of War: Technology and Tactics among the New England Indians* (Lanham, MD: Madison Books, 1991)

Theresa M. Collins and Lisa Gitelman, *Thomas Edison and Modern America: A Brief History with Documents* (Boston: Bedford/St. Martin's, 2002)

Kurt Vonnegut, *Player Piano* (Delta, 1999 [1952])

SCHEDULE

Introduction

Aug. 16 Lecture: What Is Technology?

Aug. 21 Lecture: Technology and the Idea of Progress in American History

Aug. 23 Film: *A Man, A Plan, A Canal: Panama*

Aug. 25 Discussion

Required Reading:

Cowan, *Social History*, pp. 1-4, 201-218; *Leo Marx, "The Idea of 'Technology' and Postmodern Pessimism," pp. 237-57; *Langdon Winner, "Do Artifacts Have Politics?" pp. 19-29.

Technology in Early America

Aug. 28 Lecture: Technologies of Colonization and Conquest

Aug. 20 Film: *Gunsmith of Williamsburg*

Sept. 1 Discussion

Required Reading:

Malone, *Skulking Way of War*, pp. 6-41, 52-100.

Sept. 4 LABOR DAY HOLIDAY: NO CLASS

Sept. 6 Lecture: The Age of Homespun

Sept. 8 Discussion

Required Reading:

Cowan, pp. 28-65; *Judith A. McGaw, "'So Much Depends on a Red Wheelbarrow': Agricultural Tool Ownership in the Eighteenth-Century Mid-Atlantic," in *Early American Technology*, pp. 328-57.

Industrialization

Sept. 11 Lecture: Technology and Nationalism: Debating Manufactures

Sept. 13 Lecture: Proto-Industrialization in an Agrarian Age

Sept. 15 Discussion

Required Reading:

*"Debate over Manufactures in the Early Republic," 103-119; *Leo Marx, "The Machine," 145-169; Cowan, pp. 67-91.

Sept. 18 Lecture: Social Implications of the Factory System

Sept. 20 Lecture: "System, Order, Uniformity"

****First Essay Due by 5pm Sept. 22****

Sept. 22 Discussion

Required Reading:

*"The Hodgdon Letters" and "Mary Paul Letters," from Thomas Dublin, ed., *Farm to Factory* (1993), pp. 39-57, 121-153; *"Some of the Beauties of Our Factory System—Otherwise, Lowell Slavery, 1845."

Sept. 25 Lecture: The Transportation Revolution
Sept. 27 Lecture: The Railroad as Industrial Symbol
Sept. 29 Discussion
 Required Reading:
 Cowan, pp. 93-118; *Nathaniel Hawthorne, "The Celestial Railroad" (1852);
 *Mark Twain, "Uncle Mumford Unloads" (1883).

Oct. 2 Lecture: The Emergence of Engineering Culture
Oct. 4 Lecture: Technology and the Rise of Corporate Capitalism
Oct. 6 Discussion
 Required Reading:
 Cowan, pp. 119-172; *Alfred D. Chandler, Jr., "The Coming of the Modern
 Industrial Corporation" in *The Visible Hand* (1977), pp. 285-314.

Oct. 9 Midterm Exam

Oct. 11 Lecture: Modernism and the Culture of Efficiency
Oct. 13 Discussion
 Required Reading:
 Collins and Gitelman, eds., *Thomas Edison and Modern America*, pp. 1-33, 63-
 127, 141-145.

Mass Production and Mass Consumption

Oct. 16 Lecture: Humans as Machines—Taylorism
Oct. 18 Film: *Cheaper by the Dozen* (1950)
Oct. 20 Discussion
 Required Reading:
 *Frederick W. Taylor, "The Principles of Scientific Management" (1911), 5-29;
 *Christine Frederick, "The New Housekeeping" (1913); *Henry Mitchell,
 "Indian Canoe Makers," and Nelson Algren, "Highpockets" (1930s), from
 Ann Banks, ed., *First Person America*, pp. 75-76, 90-92.

Oct. 23 Lecture: Our Ford, Who Art in Heaven: Mass Production and Automobility
Oct. 25 Discussion
 Required Reading:
 Cowan, pp. 221-248; *Henry Ford, "Mass Production," *Encyclopedia Britannica*
 (1926); *"Ford's Wage Rise Comes as Surprise," *New York Times*, Nov.
 22, 1929, 1; *Sherwood Anderson, "Lift up Thine Eyes," (1931), pp. 127-
 32, *Lee Strout White, "Farewell, My Lovely!" (1936), pp. 747-53.

Oct. 27 NO CLASS—FALL BREAK

Oct. 30 Lecture: Mass Communications Technologies
Nov. 1 Lecture: Gender, Work, and Leisure in the New Economy
Nov. 3 Discussion
 Required Reading:
 Cowan, pp. 273-294; *Susan Douglas, "Populist Culture and Populist
 Technology: The Amateur Operators," in *Inventing American
 Broadcasting* (1987), pp. 187-215.

Nov. 6 Lecture: Industrial Farming, Industrial Feeding
Nov. 8 Lecture: Technology and Environment in Industrial America
Nov. 10 Films: *Plow that Broke the Plains* (1936) and *The River* (1938)

The Technological Society

Nov. 13 Lecture: Aeronautics and the Systems Approach
Nov. 15 Lecture: World War II—A Technological Turning Point?
Nov. 17 Discussion
 Required Reading:
 Cowan, pp. 249-271; begin reading Vonnegut, *Player Piano*.

Nov. 20 Lecture: Inventing the Electric Guitar
 Continue reading Vonnegut, *Player Piano*

Nov. 22 NO CLASS—THANKSGIVING BREAK
Nov. 24 NO CLASS—THANKSGIVING BREAK

Nov. 27 Lecture: Technology in the Cold War
Nov. 28 Lecture: The Car Culture
Dec. 1 Discussion
 Required Reading:
 Vonnegut, *Player Piano*, finish; *David F. Noble, "Social Choice in Machine
 Design: The Case of Automatically Controlled Machine Tools," in *Case
 Studies on the Labor Process*, ed. Andrew Zimbalist (New York: Monthly
 Review Press, 1979), 18-50

******Second Essay Due by 5pm Dec. 6******

Dec. 4 Lecture: The Information Revolution?
Dec. 6 Discussion / Review Session

FINAL EXAM TBA