HTS 3083A, Fall 2012 MWF, 9:05-9:55 Clough Commons 423 Professor S. W. Usselman Old CE 108C; M, 2-4, and by appt. steve.usselman@hts.gatech.edu

Technology and the Shaping of America

Introduction

As its title suggests, this course explores the place of technology in American history. Our concern is not merely with things and processes, but rather with how technologies have interacted with society and culture in complex and important ways. Those interactions sometimes occurred in the form of a challenge and response, in which various groups and individuals reacted to new technical possibilities. On other occasions, the interactions involved trade-offs and compromises struck by various interests who sought to shape emergent technologies. Either way, disputes over the nature and direction of technical change (and the social changes associated with it) have persistently been a central part of the American experience, and their outcomes have mattered a great deal to the lives of all Americans.

Learning Objectives

- 1) Acquire an understanding of the basic chronology of major technological changes across the course of U.S. History and an appreciation for how those changes have mattered to the life of the nation and its peoples.
- 2) Develop an ability to assess the multiple influences that shape the development, spread, and decline of specific technologies.
- 3) Learn to assess the ways in which technologies shape cultural identities and power structures within American society and exert varied influences upon different groups.
- 4) Learn to fit specific events and technologies into larger patterns of social processes occurring across time.
- 5) Learn to read multiple and possibly conflicting interpretations of historical events and to assess them in class discussion, exam exercises, and a term paper.
- 6) Become comfortable with reading primary source materials generated by participants in historical events as a basis for class discussion and exam responses, and optionally as the basis for a term paper.

Assessment of Learning Outcomes

For Objective 1: Three quizzes, based on assigned readings, class discussions, and lectures, featuring one-paragraph identification questions pertaining to major terms and lengthier essays on major issues raised by each chronological section of the course. A final essay exam focused on issues that transcend the three chronological sections.

For Objective 2: The same as for Objective 1, plus possibly the term paper.

For Objective 3: The same as for Objective 2.

For Objective 4: The same as for Objective 3, with added emphasis on essays for the preliminary and final exams.

For Objective 5: The same as for Objective 4, with added emphasis on class discussion and the term paper.

For Objective 6: The same as for Objective 4, with added emphasis on class discussion and possibly on the term paper.

Assignments and Grading

Three quizzes, consisting of identification and essay components and covering material pertaining to one of the three chronological periods of the course, each count 20% toward your course grade. The third of them will be given during the final exam period, followed by a comprehensive essay covering material from the entire course that counts 15% of your course grade. I will provide more specific information about expectations and grading rubrics for the quizzes and exam during the review sessions. A paper of approximately 8-10 double-spaced typed pages counts 25% of your course grade. The paper should focus on a particular dispute, issue, or controversy from American history involving technology. It must make use of multiple sources beyond the assigned readings for the course. I will provide a more specific assignment and grading rubric a few weeks into the term.

Attendance, Participation, and Honor

Students bear responsibility for participating fully and equitably in the course. This means attending regularly and attentively, contributing to class discussion, and following the letter and spirit of the Georgia Tech Honor Code. Participation can make a significant difference in cases of borderline grades.

Readings

Reading assignments come from Merritt Roe Smith and Gregory Clancey, *Major Problems in the History of American Technology* and Ruth Schwartz Cowan, *More Work for Mother*, available at Engineers Bookstore. Assignments should be completed by the time of the scheduled discussion, ideally by the start of each unit. I will give more specific assignments from Smith and Clancey as the term unfolds; in some cases, I may substitute short assignments posted under the Resources section of T-Square for materials in Smith and Clancey.

Office Hours and Communications

In addition to the hours posted above, I am available after class or by appointment. I try to respond to all email by the time of my next scheduled office hours at the latest. I use T-Square for posting syllabi and other course-related materials and for making announcements.

Tips for Success

Approach history as you would a laboratory course.

Aim to assemble a larger view through the study of particular cases.

Look for how larger forces inform and influence particular events and behaviors.

Approach reading assignments (and discussions) as problem sets.

Think through the readings, and take notes to check your understanding.

Stay alert to the conversation, make notes, and press yourself to participate.

Approach the term paper as a design project.

Plan ahead and make a schedule.

Leave time to explore multiple perspectives and approaches, and to polish your work.

Conceive of history as flowing, continually, but not smoothly and rarely predictably.

Focus on sequences and timing of related events, rather than dates of every last thing.

Consider alternative outcomes and the reasons they did not come to pass.

Conceive of history as accumulating, not progressing, and as subject to selective recall.

Look for continuity as well as change.

Ask how different parties to history tell different versions of it.

SCHEDULE

NB: I have tried to be as specific as possible, but I reserve the right to make some adjustments as the term unfolds. Occasionally, these may involve slipping quiz dates. In such instances, students should inform me if the revised schedule poses undue hardship, and I will make alternative arrangements.

<u>Date</u>	<u>Topic</u>
M 8/20 W 8/22 F 8/24	Orientation Thinking about Technology, Thinking about America Discussion: Major Problems, Ch. 1
PART ONE (1584-1860). Colonies to Nation, Farm to Factory	
M 8/27 - W 8/29 F 8/31	Encounters and Adaptations Discussion: Major Problems, Ch. 2
M 9/3	NO CLASS – Labor Day
W 9/5 - F 9/7 M 9/10	Rural Regimes and Routines Discussion: Major Problems, Ch. 3; Cowan, Ch. 1-2
W 9/12 - F 9/14 M 9/17	Technology and Nation-Building Discussion: Major Problems, Ch. 4

W 9/19 - F 9/21 M 9/24	Mills and Manufactures Discussion: Major Problems, Ch. 5, Cowan, Ch. 3	
W 9/26 F 9/28	Catch-Up and Review First Quiz	
PART TWO (1860-1940). Industrial Empire		
M 10/1 - W 10/3 F 10/5	Extractive Empire Discussion: Major Problems, Ch. 6	
M 10/8 - W 10/10 F 10/12	Novelty and Display Discussion: Major Problems, Ch. 7, Cowan, Ch. 4-5	
M 10/15	NO CLASS – FALL RECESS	
W 10/17- F 10/19 M 10/22	Engineering a New Society: Taylor and Ford Discussion: Major Problems, Ch. 8 and 9	
W 10/24 - F 10/26 M 10/29	Entertainment and Community Discussion: Major Problems, Ch. 10, Cowan, Ch. 6	
W 10/31 F 11/2	Catch-Up and Review Second Quiz	
PART THREE (1940-2012). Explosiveness and Immediacy		
M 11/5 - F 11/9 M 11/12	The Bomb and The Arms Race Discussion: Major Problems, Ch. 12	
W 11/14 – M 11/19 W 11/21	Affluence and Anxiety Discussion: Major Problems, Ch. 11; Cowan, Ch. 7	
F 11/23	NO CLASS – Thanksgiving	
M 11/26 – F 11/30 M 12/3	Global Individualism (NB: PAPERS DUE 11/30) Discussion: Major Problems, Ch. 13	
W 12/5 - F 12/7	Catch-Up and Review	
F 12/14, 8:00-10:50	Third Quiz and Final Essay	