The Machine Age: Technology in American Culture and Society, 1865- Present

T/TH 11:00am – 12:20pm College Apartments, Room 9
Office Hrs: Tues/Wed 1-3pm or by appointment

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Course Description

There is no clear definition for the word technology. For many it invokes images of towering skyscrapers, fearsome locomotives, space travel, computers, forward motion, modernization, and progress. For others it is indicative of a process - the birth of mechanized industry, mass electrification, or the rise of nuclear power. For yet others it symbolizes the destruction of traditional lifeways and green spaces, a privileging of the mechanical over the human, and the invasion of privacy. A word imbued with much meaning, “technology” first entered the American vernacular after World War I – an era defined by a modernist aesthetic and faith in the power of machines and public works projects to make life better for most people. This American faith in technology did not develop overnight, nor did it remain static over time. Crucially, this dynamic understanding of technology is inextricably linked to every-changing popular conceptions of male and female, “scientific” racial hierarchies, productive and unproductive work, and what it means to be a good citizen.

This course examines the ways in which technology shapes and is shaped by American culture, thought, and politics. The class is organized chronologically, beginning in Antebellum America and ending with the computer revolution of the present day. Each class meeting will explore a thematic period in the history of American technological development and examine both the cultural and social implications of these changes through discussion of class readings and examination of primary visual and cultural texts. Over the course of the semester, we will examine such themes as the impact of factory labor on the family, technological utopianism as manifest in the space race and in science fiction, and changes to our understanding of personal privacy and individual selfhood wrought by biotechnology and cyber culture. In the process, we will seek to answer several broad conceptual questions: What is technology? How have new technologies changed the daily lives of Americans over the past 150 years? How have Americans understood these changes? How have these understandings manifested itself in culture and politics? Finally, has technology produced a better world? If so, for whom?

Requirements and Grading

Students will be evaluated on a combination of productive class participation, weekly blackboard posts, short writing assignments, and a final semester project. The final paper represents the greatest part of the grade for this class and includes an initial description and bibliography, an in-class presentation, and a polished final paper due the day of the scheduled final exam. Please see below for a grading rubric and detailed assignment descriptions.
Class Participation

Students are expected to attend each class meeting, come prepared to discuss assigned materials, and engage in respectful, on-topic discussion.

Attendance will be taken. Students who know they will be unable to attend class much produce a note from the health center or file appropriate documentation with the university. Unexcused absences will be docked from the student’s final participation grade.

As part of the class participation grade, students are expected to post once a week to Blackboard. At the first class meeting, students will be assigned either the readings for Tuesday or Thursday. All posts must be logged by 5pm the night before class so that the instructor and classmates have a chance to read them. This post should be about a paragraph in length (150 wds) and should contain questions about the reading; connections made to past readings or relevant texts; or what students found most interesting about the text.

Optional Field Trip: “FOOD: Transforming the American Table”
Smithsonian NMAH, Washington, D.C. April 11, 2015

This trip is optional, however students who attend and produce a 1-2 page reflection essay (12pt font, 1 in margins, double spaced) will receive 3 points toward their final project grade. We will leave from College Apartments Saturday morning and will return that evening. I have secured a Campus Activities van and have secured funds to supplement lunch at the NMAH.

For more info on the exhibition see: http://americanhistory.si.edu/exhibitions/food

Short Film Project (2-3 page reflection essay + 5 minute film)

Project Reflection Essay DUE Feb 26, 2015

Final Film DUE March 17, 2015

In groups of 2 to 3, students will plan, write, film, and edit a short documentary film. The film must creatively address one of the key course themes as outlined in Week 1 including: the anthropocene, technological determinism, and energy system and social development. If needed, camera equipment can be checked out from the W&M Student Media Center.
During the week of Feb 26 students will turn in short descriptions and plans for the completion of their films. This essay must address which theme the group has chosen and how they plan to engage with these topics. Students are encouraged to submit their final projects to the W&M Global Film Festival for consideration.

**Final Paper Description and Initial Bibliography (1-2 pages)**

**DUE March 19, 2015**

The paper description should be one-to-two pages in length. It should detail the student’s initial topic idea and broad research questions. The bibliography should list at least 5 scholarly sources that the student plans to use. On March 19 students will sign up for individual meetings with the instructor to discuss paper topics.

**Final Paper Presentation (10 min)**

Students will prepare a 15 minute, in-class presentation on their research. It is suggested that students prepare a visual aid (using Powerpoint or other applicable technology) to accompany the presentation. After 15 minutes, students will have 5 minutes to answer questions from their audience. Please practice your presentations in advance so that you do not go over time.

**Final Paper (15 pgs)**

The final paper is to be a 15 page research project on a topic of the student’s choosing. This project should represent original research into the chosen topic and students should demonstrate the use of both scholarly and primary source documents. Students will be graded on clarity of thesis, argument structure, and general writing precision. **Students are welcome to turn in a draft to the instructor two weeks before the final deadline for feedback.**

**NOTE:** students are encouraged to make use of the Writing Resource Center [http://www.wm.edu/as/wrc/](http://www.wm.edu/as/wrc/) and the History Writing Resource Center [http://www.wm.edu/as/history/undergraduateprogram/historywritingresourcecenter/?svr=web](http://www.wm.edu/as/history/undergraduateprogram/historywritingresourcecenter/?svr=web) when completing their final papers.

**Required Texts**

Book-length texts are listed below and will be available at the campus bookstore, all other readings will be available on-line via Blackboard or on reserve at Swem Library.


Calendar

Week 1:
Jan 22, TH: Syllabus
Readings: Look over syllabus in advance. Come with questions.

Week 2:
Jan 27, T: Main Themes – What is technology and how do we talk about it?
Readings:

Jan 29, TH: Citizenship, Work, and the Industrial Revolution
Readings:
Cowan, Social History, Chapter 7-8, p. 149-199.

Week 3:
Feb 3, T: Infrastructure Building – Steam power, trains, and the shortening of distance
Readings:
Nye, Consuming Power, Chapters 4, p.103-128.
Cowan, Social History, Chapter 5, p. 93-118.

Feb 5, TH: Responses to Industrialized Labor
Readings:
Oldenziel, Making Technology Masculine, Chapter 2, p. 51- 86.

Week 4:
Feb 10, T: The New City
Readings:
Nye, Consuming Power, Chapter 3, p. 71-102.

Feb 12, TH: Industrialized Landscapes – Extraction and the Destroyed Pastoral
Readings:
Making Old Tools Work Better: Pragmatic Adaptation and Innovation in Gold-Rush Technology
Ronald H. Limbaugh, California History, Vol. 77, No. 4, A Golden State: Mining and Economic

Week 5:

Feb 17, T: Technological Spectacle - Electric Systems and Civic Celebration
Readings:
Nye, American Technological Sublime, Chapter 6-7. p. 143-172.

Feb 19, TH: Technological Spectacle Part II – Individualized Electrification
Readings:
de la Pena The Body Electric, Chapter 3, p. 231-322.

Week 6:

Feb 24, T: The Military-Academic-Industrial Complex
Readings:
Cowan, Social History, Chapter 11, p. 249-271.

Feb 26, TH: The Automobile Revolution
Readings:
Cowan, Social History, Chapter 10, p. 221-248.

Week 7:

March, 3, T “Atoms for Peace” or Mutually Assured Annihilation?
Readings:

March, 5, TH – Technological Utopianism and the Cold War **Object Excavation Due***
Readings:
Nye, American Technological Sublime, Chapter 9, p. 225-256.
SPRING BREAK MARCH 9-13

Week 8:

March 17, T: **Limits to the Tech Utopia**
Readings:


March, 19, TH: **Suburbanization and Urban Renewal**
Readings:
Samuel Zipp, *Manhattan Projects: The Rise and Fall of Urban Renewal in Cold War New York*, Chapter 6, p. TBD

Week 9:

Mar 24, T: **Technological Consumers**
Readings:

Mar 26, TH: **New Communication Technologies**
Readings:
Cowan, *Social History*, Chapter 12, p. 273-301.

Week 10:

Mar 31, T: **Disasters, Meltdowns, and Spills** **Final Paper Description Due***
Readings
Podcast: Exploring Environmental History, “Silent Spring at 50”
http://www.environmentandsociety.org/mml/silent-spring-50

April 2, TH: Energy Consumption in Crisis
Readings:
Nye, Consuming Power, Chapter 8, p. 217-249.

Week 11:

April 7, T: Biology and Biotechnology
Readings:

April 9, TH: Genetically Engineered Foods – The new “Natural”
Readings:
Cowan, Social History, Chapter 13 p. 301-326.

April 11, SAT: OPTIONAL: Field trip to Smithsonian NMAH
Leave from College Apartments 8am

Week 12:

April 14, T: Virtual Landscapes – Community and private property in Early Cyberspace
Readings:

April, 16, TH: Artificial Intelligence – Changing definitions of life, intelligence, and personhood
Readings:
D. Quentin Miller, “Deeper Blues, or the Posthuman Prometheus: Cybernetic Renewal and the

**Week 13:**

April 21, T: NO IN-CLASS MEETING: Scheduled Meetings with Instructor

April 23, TH: NO IN-CLASS MEETING: Scheduled Meetings with Instructor

**Week 14:**

April 28, T: Class Presentations

April 30, TH: Class Presentations

******* FINAL PAPER DUE DURING SCHEDULED CLASS FINAL EXAM *********

[DATE AND TIME TBD]