



History 3209: History of Technology

Section D770 Tues. & Thurs. 2:30-3:45
Midway 401

Dr. Geoff Zylstra

Office Hours: Wed 10:15-11:15; Tu 4:45-5:45

Office: Namm 624

Email: gzylstra@citytech.cuny.edu

Course Description

This course examines technological changes and the development of a technological society in North America from Native American inhabitation to the late twentieth century. It focuses on the relationship between technology and human values, giving specific attention to the ways in which innovations and technological systems shape and are shaped by American society and culture. This course will use technological development as a way to explore social divisions such as race, class and gender, economic development, the nature of work and labor, technological determinism, the relationship between science and technology, human relationships with the environment, and the appropriate use of technology.

HIS 3209 fulfills the LAA/LAS Associate Capstone requirement, though it can also be taken for other requirements and electives. The City Tech LAA/LAS Associate Capstone is designed for students entering their second year in the program. LAA/LAS Associate Capstone courses are meant to prepare students to continue their studies in a bachelor's degree, third-year, or junior, level. In addition, Associate Capstone courses are meant to help students develop an awareness of the importance of knowledge, values and skills developed in general education courses; and to integrate this knowledge, these values and these skills into their advanced academic study and professional careers.

Historical Objectives

- Understand major technological developments that have occurred in the United States from prehistory to the present.
- Recognize how technological developments related to the social and cultural values of everyday people.
- Understand the roots of our current technological society.
- Write a research paper that connects evidence to an overarching historical narrative.

General Education Objectives

- Use analytical and critical thinking skills to communicate in both written and verbal forms.
- Write an essay that articulates your point of view, following an essay format.
- Distinguish between and analyze both primary and secondary sources.

Texts

Ruth Cowan, *A Social History of American Technology*
(Oxford UP, 2018) ISBN-13: 978-0195387261

Carroll Pursell. *A Hammer in their Hands: A Documentary History of Technology and the African-American Experience* (Cambridge: MIT Press, 2005). ISBN-13: 978-0262661997

Aldous Huxley. *Brave New World* (New York: HarperCollins, 1932).

Assignments and Grading

- One 2-3 page essay style paper based on the course readings – 15%
- One Quiz – 5%
- Responses to the documentary readings (due every day that we read from the Pursell text) – 15%
- One 6-7-page research paper based on library research – 20%
- One mid-term exam – 15%
- One Final exam – 20%
- Class participation – 10%
- One extra credit paper: Museum review – Maximum of 8 points to final grade.

I will supply you with the written assignments well ahead of their due dates and will not grant extensions, period. If you have a conflict, you must turn in the assignment early.

College Grading Scale

A	93-100	C	70-76.9
A-	90-92.9	D	60-69.9
B+	87-89.9	F	59.9 and below
B	83-86.9	WU	Unofficial Withdrawal
B-	80-82.9	WF	Withdrew Failing
C+	77-79.9		

Attendance

Attendance in class is expected and I will take attendance every class period. I will grant each student three absences for medical and personal issues. Upon the fourth absence, your final grade for the course will drop 10 points. Additionally, be in class on time. If you are late three times, I will count that as one absence. Excused absences must be discussed in advance. In the event of a major medical or family emergency, you must supply me with written documentation.

Student conduct

- You must respect your classmates and their learning experience.
- Cell Phones pagers and other personal electronic devices will not be tolerated in class unless you are using them for class purposes.
- Do not plagiarize. Plagiarism (from Latin *plagiare* "to kidnap") occurs when one person claims or implies original authorship, or incorporates material from another person's written or creative work.

You are plagiarizing if you:

1. Copy words from someone else without citing them.
2. Copy ideas from someone else without citing them.
3. Change words, but copy sentence, paragraph, or plot structure from someone else without citing them.
4. Forget to put a quote in quotation marks.

According to the City Tech's academic integrity statement: "Academic dishonesty is prohibited in The City University of New York and at New York City College of Technology and is punishable by penalties, including failing grades, suspension, and expulsion."

Citations

You can avoid plagiarism by citing your sources. The following examples show two acceptable citing methods.

Parenthetical Citation:

"The *social* history of technology goes one step further, integrating the history of technology with the rest of human history. It assumes that objects have affected the ways in which people work, govern, cook, transport, communicate; the ways in which they live. It also assumes that the ways in which people live have affected the objects that they invent, manufacture, and use. A social history of technology, in short, assumes a mutual relationship between society and technology" (Cowan 3).

Footnote:

"The *social* history of technology goes one step further, integrating the history of technology with the rest of human history. It assumes that objects have affected the ways in which people work, govern, cook, transport, communicate; the ways in which they live. It also assumes that the ways in which people live have affected the objects that they invent, manufacture, and use. A social history of technology, in short, assumes a mutual relationship between society and technology."¹

¹ Ruth Schwartz Cowan, *A Social History of American Technology* (New York: Oxford, 1997), 3.

Course Schedule

Tuesday January 29: What is Technology?

Thursday January 31: Does Technology have Politics?

*Langdon Winner handout

Tuesday February 5: First Nations (Native American Technologies)

A Social History of American Technology, Ch 1

Thursday February 7: Colonial Technology – Contact and Exchange

A Social History of American Technology, Ch 2

*A Hammer in their Hands, Part I & Ch 1

Thursday February 14: Colonial Technology – Agriculture and Artisans

*A Hammer in their Hands, Ch 2 – 3

Tuesday February 19: The Debate over Manufactures - Guest Lecture on the Philosophy of Technology

A Social History of American Technology, Ch 4

Thursday February 21: Transportation and Trade

Short Paper Due: Write an essay discussing society, technology and their relationship. As we learned from our discussion of the Langdon Winner essay, the study of technology has been defined by (1) technological determinism (2) the social construction of technology and (3) technopolitics. Use the relevant ideas and examples from the course readings to illustrate or show the points you make in your essay.

Tuesday February 26: Factory Systems (Manufacturing)

*A Hammer in their Hands, Ch 4

Thurs February 28: Industrialization, Commodification and the Environment

A Social History of American Technology, Ch 5

Tuesday March 5: Guest Lecture – Biology and Technology

A Social History of American Technology, Ch 6

Thursday March 7: Industrialization of Space (Urban Development)

*A Hammer in their Hands, Part III & Ch 5

Tuesday March 12: Communication Technology

Thursday March 14: Electricity and the AC/DC Debate

Tuesday March 19: Midterm Exam

Thursday March 21: Engineers and Scientific Management

A Social History of American Technology, Ch 7

Tuesday March 26: Scientific Management and Society

*A Hammer in their Hands, Ch 7 & 9

Thursday March 28: *Modern Times*

Tuesday April 2: Automobility and Mass Production

A Social History of American Technology, Part III & Ch 8

*A Hammer in their Hands, Ch 10

Thursday April 4: Consumer Culture

Tuesday April 9: Aldous Huxley *Brave New World*

Read the Entire Book beginning with Chapter 1

Quiz on *Brave New World*

Thursday April 11: The Wonders of Chemistry

A Social History of American Technology, Ch 12

*A Hammer in their Hands, Ch 18

Tuesday April 16: Military, Industrial, Educational Complex

*A Hammer in their Hands, Part IV & Ch 11 & 12

Thursday April 18: To Be Announced

A Social History of American Technology, Ch 9

Tuesday April 30: Communications and Media

A Social History of American Technology, Ch 10

Thursday May 2: Guest Lecture – English and Media Studies

Research Paper Due

Tuesday May 7: Computer Systems

A Social History of American Technology, Ch 11

Thursday May 9: Personal Computers

Research Paper Due

Tuesday May 14: The Internet

*A Hammer in their Hands, Ch 17

Thursday May 16: Biotechnology

A Social History of American Technology, Ch 13

Tuesday May 21: Final Exam