

## **History 3209: History of Technology**

Section \*\*\*\*\* Tuesday and Thursday \*\*\*\*\*

Voorhees \*\*\*\*\*

Dr. Geoff Zylstra

Office Hours:

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### **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.

### **Course 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.

### **General Education Objectives**

- Distinguish between and analyze both primary and secondary sources.
- Use analytical and critical thinking skills to communicate in both written and verbal forms.

### **Texts**

Ruth Cowan, *A Social History of American Technology*  
(Oxford UP, 1997) ISBN-13: 978-0195046052

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%
- Written responses to the documentary readings (12 pages total, 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%

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

<u>Letter Grade</u>	<u>Meaning of Letter Grade</u>	<u>Number Grade</u>
A	Exceptional	100-93
A-	Superior	92.9-90
B+	Very good	89.9-87
B	Good	86.9-83
B-	Above Average	82.9-80
C+	Slightly Above Average	79.9-77
C	Average	76.9-70
D	Poor	69.9-60
F	Failure	59.9-0

## Attendance

Attendance in class is mandatory and I will take attendance every class period. However, the State of New York requires that I grant each student three absences for medical and personal issues (10% of class time). Upon the fourth absence, your final grade for the course will drop 10 points. If you are absent more than six times you will receive a withdrawal. 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; it also assumes that changes in one can, and have induced changes in the other" (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; it also assumes that changes in one can, and have induced changes in the other."<sup>1</sup>

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

## **Course Schedule**

**Thursday August 25: What is Technology?**

**Tuesday August 30: Does Technology have Politics?**

\*Langdon Winner handout

**Thursday September 1: First Nations (Native American Technologies)**

A Social History of American Technology, In the Beginning & Ch 1 (p1-27)

**Tuesday September 6: Colonial Technology – Contact and Exchange**

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

**Thursday September 8: Colonial Technology – Necessity and Invention?**

**Tuesday September 13: Remaking Agriculture**

A Social History of American Technology, Ch 3

\*A Hammer in their Hands, Ch 2 – 3

**Thursday September 15: Artisans into Industry**

**Short Paper Due:** Write an essay discussing society, technology and the relationship between them. 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 September 20: The Debate over Manufactures**

A Social History of American Technology, Part II Industrialization & Ch 4

**Thursday September 22: Transportation, and Trade**

A Social History of American Technology, Ch 5

**Tuesday September 27: Factory Systems (Manufacturing)**

\*A Hammer in their Hands, Ch 4

**Thursday September 29: Industrialization, Commodification and the Environment**

**Thursday October 13: To Be announced**

**Friday October 14: Industrialization of Space (Urban Development)**

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

**Tuesday October 18: Midterm Exam**

**Thursday October 20: Communication Technology**

A Social History of American Technology, Ch 7

**Tuesday October 25: Electricity and the AC/DC Debate**

\*A Hammer in their Hands, Ch 6

**Thursday October 27: Engineers and Scientific Management**

\*A Hammer in their Hands, Ch 7 & 9

**Tuesday November 1: To Be Announced**

**Thursday November 3: *Modern Times***

**Tuesday November 8: Tuesday April 8: Automobility and Mass Production**

\*A Hammer in their Hands, Ch 10

**Thursday November 10: Consumer Culture**

A Social History of American Technology, Part III & Ch 10

**Tuesday November 15: Aldous Huxley *Brave New World***

Read the Entire Book beginning with Chapter 1

**Quiz on *Brave New World***

**Thursday November 17: Culture of Invention**

**Tuesday November 22: The Wonders of Chemistry**

A Social History of American Technology, Ch 11

\*A Hammer in their Hands, Ch 18

**Tuesday November 29: Military, Industrial, Educational Complex**

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

**Thursday December 1: To Be Announced**

**Rough Draft of Research Paper Due**

**Tuesday December 6: Personal Computers**

A Social History of American Technology, Ch 12

**Research Paper Due**

**Thursday December 8: The Internet**

\*A Hammer in their Hands, Ch 17

**Thursday December 15: Biotechnology**

A Social History of American Technology, Ch 13

**Tuesday December 20: Final Exam**