

# HIST 214-H01

## Technology and Society in American History

Professor: Dr. Kyle Riismandel

Classroom: CKB220

Time: MONDAY AND WEDNESDAY, 1-2:25PM

Office: Cullimore 326

Office Hours – Monday 3-4PM, Tuesday 4-5PM, Wednesday 3-4PM, and by appointment

Contact: [kriis@njit.edu](mailto:kriis@njit.edu)/973-596-3379

### **Course Description:**

This course examines the relationship between technology and society throughout the history of the United States. We will analyze the roles and impacts of major technological innovations within their cultural and historical contexts seeking to understand how these contexts shaped and were shaped by these technologies including electricity, railroads, video games, the internet, among others.

### **Course Goals and Assessments**

#### **Students will:**

Identify, analyze, and deploy secondary sources to make historical arguments	Lecture Primary and Secondary Readings Discussion Exams Paper Assignment
Practice the skills necessary to analyze, discuss, and write about primary and secondary sources related to the study of American culture and technology	Lecture Primary and Secondary Readings Discussion Exams Paper Assignment
Identify, analyze, and differentiate key terms and ideas in the history of technology	Lecture Primary and Secondary Readings Discussion Exams
Demonstrate understanding of the relationship between technology and American society at various points in US history	Lecture Primary and Secondary Readings Discussion Exams

### **COURSE TEXTS**

All course readings are available via [moodle.njit.edu](https://moodle.njit.edu). **Please bring all readings to class.**

## **ASSIGNMENTS**

**YOU MUST COMPLETE ALL ASSIGNMENTS TO PASS THE COURSE. FAILURE TO DO SO WILL RESULT IN AN AUTOMATIC F.**

### **Reading Responses - 3% x 4 = 12%**

Rather than a summary, your response should address the following questions for a secondary source reading:

- What is the central argument?
- What evidence supports that argument?
- How does the reading relate to that week's lecture?

### **Primary Source Analysis – 3% x 4 = 12%**

Rather than a summary, your response should address the following questions:

- When was it from?
- What did the source communicate about the values, ideals, and culture of its time and place?
  - In particular, you may want to consider some of the following depending on the source:
    - What did the source tell you about a particular technology's intended or unintended use?
    - What did the source say about the technology as part of a larger technological system?

### **Technology Analysis Paper – Draft – 5% Final Draft - 25%**

This assignment will ask you to analyze a technology not considered during the course of the semester. In doing so, you will put that technology in its historical context explaining to the reader what that innovation helps us understand about the time and place it was created and used.

Draft Due – 10/25

Final Draft Due – 12/4

### **Class Participation - 21%**

Students are expected to participate actively in all class discussions and activities, to be respectful to the instructor and their fellow classmates, to arrive to class on time, and to stay focused on what is happening in our classroom not on chatting or using digital devices.

Participation will be assessed on the quality of contributions to class discussions. Quality participation demonstrates the following:

- Understanding of the historical context as gleaned from lectures and readings
- Completion of that week's assignments such as readings and reading responses
- A willingness to engage in critical assessment of course texts and lectures

Students are expected to attend class and to be punctual. Excessive absences or late arrivals will result in a greatly diminished class participation grade. Further, there will be only one screening of each film so please do your best to not miss class.

### **Final Exam - 25%**

The final exam will be a take-home essay exam that will ask you to think integratively and comparatively about the topics, ideas, and questions raised over the course of the entire semester.

### **Course Policies**

**Attendance:** Students are expected to attend all course meetings on time unless receiving prior authorization. Missing class will not only adversely affect your class participation grade, but will prevent you from learning course content and skills. This policy refers to all absences, including missing class because you are ill or have a family emergency. However, if you miss class to attend an NJIT sponsored event, to observe a religious holiday, or documented illness such absences will be excused. For these absences to count as excused, you must receive permission from the instructor in advance or provide a doctor's note in the case of sickness.

**Office hours/student appointments:** My office hours will be every Monday 3-4PM, Tuesday 4-5PM, and Wednesday 3-4PM. I am also available to meet by appointment if students are unable to make it to my office during these times. Feel free to send me an email to set up a meeting if you'd like to talk to me or if you have any questions about course topics, assignments, or grades.

**Academic dishonesty:** Students are expected to obey the NJIT honor code, and I will enforce this code to its fullest extent. For the tenets of the code or for clarification of what constitutes plagiarism or cheating, please consult: <http://www.njit.edu/academics/honorcode.php>.

**Cell phones:** Use of a cell phone in class for unauthorized activity will result in student's choosing either:

1. Immediate expulsion from class
2. Placement of the student's cell phone at the front of class with the instructor for the remainder of that class and each class for the remainder of the semester.

Though, you may think texting, using Twitter, etc. is innocuous or invisible, it is not. It interrupts the flow of discussion, distracts other students, and will inevitably embarrass the texter when I have to call you out.

**Laptops and miscellaneous technology rules:** Students may use laptops in this course for class-related activities only. If I learn that students are using laptops for any other purpose, I will issue a laptop ban for this class. Students are also prohibited from listening to ipods or using any other device in this class that has not received prior authorization. Further, do not keep headphones in your ears even if you are not listening to anything. Essentially, you are in class approximately 3 hours a week. Please be present and prepared when you are here. If you would rather text or surf the internet, please do not come to class.

**Students with Disabilities or Special Needs:** Students who have disabilities or special needs should contact NJIT's Student Disability Services to help procure accommodations in completing coursework. The center can be found at <http://www.njit.edu/counseling/services/disabilities.php>.

## **Course Schedule**

### **Week 1 – What is technology and how do you study it?**

9/6) Introduction/What is Technology?/What is History?

### **Week 2**

9/11) Theories of Technology

Secondary Sources

Langdon Winner, “Do Artefacts have Politics?” *Daedalus*, Vol. 109, No. 1, (Winter, 1980), pgs. 121-136.

Merritt Roe Smith. “Technological Determinism in American Culture,” in Merritt Roe Smith and Leo Marx, eds. *Does Technology Drive History?* (MIT Press, 1994). Pgs 1-35.

### **Technology in Revolutionary America**

9/13) Printing press

### **Week 3**

9/18) Discussion – Print Culture

Primary Sources

Printed Ephemera, 1763-1800 - <https://www.loc.gov/collections/broadsides-and-other-printed-ephemera/>

Secondary Sources

Trish Loughran, *The Republic in Print: Print Culture in the Age of U.S. Nation Building, 1770-1870*, selections

Heather A. Haveman, *Magazines and the Making of America: Modernization, Community, and Print Culture, 1741-1860*, pp. 57-86

### **The Industrial Revolution**

9/20) The Steam Engine

### **Week 4**

9/25) Discussion -- The Factory

Primary Source

*Lowell Offering*, selections, 1840

Secondary Source

Alan Dawley, *Class and Community: The Industrial Revolution in Lynn*, Ch. 3 – available as an e-book through the NJIT Library

### **Agriculture, Slavery, and Technology**

9/27) The Cotton Gin

### **Week 5**

10/2) Discussion – Technology and Slavery

Primary Source

Ruby Lorraine Radford, “Slavery,” Georgia Slave Narrative Collection, 1937

Secondary Source

Susanna Delfino and Michelle Gillespie, eds., *Technology, Innovation, and Southern Industrialization: From the Antebellum Era to the Computer Age*, “Slavery and Technology in Louisiana’s Sugar Bowl,” pp. 68-97 -- available as an e-book through the NJIT Library

### **Industrialization and Organized Labor**

10/4) Unions and Strikes

### **Week 6**

10/9) Discussion

Primary Source

Karl Marx, *Capital*, vol. 1, ch. 15, sect. 1-5

Secondary

Paul Krause, *The Battle for Homestead: Politics, Culture, and Steel, 1880-1892*, Ch. 12

### **Electricity and Communication**

10/11) Electrifying the Nation

**Week 7**

10/16) Discussion

Primary Source

Nikola Tesla, *My Inventions*, selections

Secondary Source

Ernest Freeberg, *The Age of Edison*, selections

Linda Simon, *Dark Light: Electricity and Anxiety from the Telegraph to the X-ray*, Ch. 5

10/18) Writing a Research Paper

**Week 8 – From Telegraph to Telephone in the Late 19th Century**

10/23) NO CLASS – Work on research paper

10/25) The Telephone and AT&T

Primary Source

“Kingsbury Commitment,” AT&T Annual Report, 1913,

<https://www.washingtonpost.com/blogs/the-switch/files/2013/12/KC1-NC-Kingsbury-VP-of-ATT-letter-to-AG.pdf>

Secondary Source

Claude Fischer. “‘Touch Someone’: The Telephone Industry Discovers Sociability,” *Technology and Culture*. V. 29, n. 1 (Jan., 1988), pgs. 32-61.

**Week 9 – The Automobile and Highway System**

10/30) Fordism

11/1) Discussion – Freeways vs Cities

Primary Source

E.B. White. “Farewell, My Lovely,” *The New Yorker*, May 16, 1936.

<http://www.wesjones.com/white1.htm>

Secondary Source

Eric Avila. *The Folklore of the Freeway: Race and Revolt in the Modernist City*, Ch. 3

**Week 10 – Household Technology**

11/6) Utilities and Appliances

11/8) Television

Primary Sources

*The Honeymooners*, “TV or Not TV,” 1955

*Ladies Home Journal*, selections --

<https://archive.org/stream/ladieshomejourna65janwyet/ladieshomejourna65janwyet#page/n13/mode/2up>

Secondary Source

Lynn Spigel, *Make Room for TV: Television and the Family Ideal in Postwar America*, Ch. 3, pp. 73-98

**Week 11 – Cold War, Hot Technology**

11/13) Nuclear Weapons/Nuclear Power

11/15) Screening: *Dr. Strangelove; Or How I learned to Stop Worrying and Love the Bomb* (1964)

Primary Source

*Dr. Strangelove; Or How I learned to Stop Worrying and Love the Bomb* (1964)

Secondary Source

Paul Boyer, *By the Bomb's Early Light: American Thought and Culture At the Dawn of the Atomic Age*. (University of North Carolina Press) 1994, selections

**Week 12**

11/20) Discussion – *Dr. Strangelove*

**Cars, Highways, and the Environment**

11/22) Automobiles and the Environment

Secondary Source

Christopher W. Wells, *Car Country: An Environmental History*, Ch. 7

**Week 13 – Cold War Computers and Industrial Machines**

11/27) Mainframes and IBM

Secondary Source

Steven Lubar, “ ‘Do Not Fold, Spindle, or Mutilate’: A Cultural History of the Punch Card”

11/29)

Primary Sources

United States Air Defense System Plan – October 24, 1950

*War Games*, 1983

Secondary Source

Stephanie Schulte, “The WarGames Scenario: Regulating Teenagers and Teenage Technology,” pp. 23-55

**Week 14 – Personal Computers and the Internet**

12/4) The Personal Computer

Primary Source

Bill Gates, “Open Letter to Hobbyists,” February 3, 1976

Secondary Source

Paul Ceruzzi. “From Scientific Instrument to Everyday Appliance: The Emergence of Personal Computers, 1970-77,” *History and Technology*. V.13, 1996, pp. 1-31

12/6) The Internet

Primary Sources

Tim Berners-Lee. *Weaving the Web: The Original Design and Ultimate Destiny of the World Wide Web*. (New York: HarperCollins), 2000, chapter 1-3, pgs 1-34.

Bill Gates. *The Internet Tidal Wave*, Memo, May 26, 1995.

**Week 15 - New Medical Technologies**

12/11) 23&Me and the Rise of Personal Medicine

Primary Source

Harriet McBryde Johnson. “Unspeakable Conversations,” *The New York Times Magazine*, Feb. 16, 2003, <http://www.nytimes.com/2003/02/16/magazine/unspeakable-conversations.html?sec=health&pagewanted=all>

Secondary Source

Alondra Nelson, *The Social Life of DNA: Race, Reparations, and Reconciliation After the Genome* (New York: Beacon, 2015)

12/13) Final Exam Review

**Final Exam: Due Monday, 12/18, 5PM via TURNITIN on MOODLE**

**Late exams will not be accepted.**