



John Gast, American Progress, 1872.  
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## Topics in American History

# Technology in American History

### COURSE GUIDE\*

HIS 213 GHP/WI

Spring 2018

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Hours: by appointment gladly given

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*\*Note that this syllabus is subject to change at the discretion of the instructor. Any necessary changes in the syllabus or course schedule will prioritize effectiveness for student learning.*

## Course Overview and Learning Outcomes

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It's obvious isn't it? Astronauts are technologically superior to cave men! Airplanes are superior to the horse and buggy. The computer is superior to the typewriter. At first glance human history looks like a record of steady progress from the Stone Age to the internet. But let's take another look at that. How should we understand the role of technology in human history? At a time when we worry about our ability to protect the integrity of election results or safeguard our personal identity, are we driving the machines or are they driving us? Karl Marx said that "the hand-mill gives you society with the feudal lord; the steam-mill, society with the industrial capitalist." Focusing on the role of technology in the history of the United States, this course will examine the question, "Does technology drive history?" We will explore the roles of men and women who invented and used technology through the study of specific artifacts—from the ax to the light bulb to the electric washing machine. We'll traverse the long history of the United States from the colonial era through the twentieth century focusing on invention as a social process and how technology influenced everyday life.

## General Education Requirements

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This course satisfies General Education (GEC) requirements established by the UNCG faculty for historical perspectives (GHP/GMO) and the Global Marker (GL):

General Education Program Learning Goals addressed by HIS 208:

**LG1. Foundational Skills:** *Think critically, communicate effectively, and develop appropriate fundamental skills in quantitative and information literacies.*

**LG3. Knowledge of Human Histories, Cultures, and the Self:** *Describe, interpret, and evaluate the ideas, events, and expressive traditions that have shaped collective and individual human experience through inquiry and analysis in the diverse disciplines of the humanities, religions, languages, histories, and the arts.*

### Historical Perspectives (GHP)

Students use an historical approach to a specific region and period to explore the context of events (social structure, economics, political systems, culture, or beliefs), evaluate evidence and divergent interpretations, and communicate historical ideas in writing.

At the completion of a GHP course, the student will be able to:

- Demonstrate a general knowledge and appreciation of historical events, social structures, economics, political ideologies and systems, belief systems, or cultural expressions
- Demonstrate an understanding of some of the diverse historical events, forces and/or contexts in the ancient (GPM) and modern (GMO) world
- Analytically and critically evaluate historical evidence and divergent interpretations
- Communicate historical ideas clearly

**Writing Intensive Student Learning Outcome:** Students will be able to write in genres appropriate to the discipline(s) of the primary subject matter of the course.

These general education objectives are applicable to all courses with GHP and GL credit regardless of subject matter. The specific HIS 208 course objectives described below are designed to address these General Education Program Goals.

## Required Readings

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Nye, David. *Technology Matters: Questions to Live With*. Cambridge, Mass.: The MIT Press, 2007.

In addition to the required book, various primary source documents and historical essays will be posted to Canvas. Check the schedule for reading assignments.

## Course Learning Objectives

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Upon completing HIS 213 the student will be able to:

1. Explore enduring questions about the history of technology.
2. Evaluate the role of inventors and users in the history of American technology.
3. Explain how technologies are socially produced.
4. Locate and evaluate appropriate information sources to contextualize a primary source.
5. Demonstrate the following benchmarks for evidence use in historical writing:

Characteristic	Benchmark
Factual and interpretive accuracy	The essay interprets the documentary evidence accurately—appropriate interpretation. Fair representation of people, issues, events as opposed to misinterpretation or misunderstanding. Factual details and chronology are also accurate.
Persuasiveness of evidence	<p>The essay substantiates the claim with evidence that is compelling, relevant, significant, and specific.</p> <ul style="list-style-type: none"> <li>• The weight of the evidence is sufficient—even compelling.</li> <li>• The evidence provided is relevant to the claim—clearly connects to the main point.</li> <li>• The selected evidence is historically significant rather than marginally related.</li> <li>• Evidence is specific and cites sources where possible.</li> <li>• Evidence is convincing to the reader.</li> </ul>
Sourcing of evidence	<ul style="list-style-type: none"> <li>• The essay notes authors of documents or other sources of evidence used to make the argument.</li> <li>• The use of evidence recognizes biases inherent in sources cited.</li> <li>• Evidence is balanced and credible.</li> </ul>
Corroboration of evidence	<ul style="list-style-type: none"> <li>• The claim responds to and accounts for the available evidence.</li> <li>• The essay synthesizes multiple pieces of evidence that work together to support the claim.</li> <li>• The essay explains how different pieces of evidence work together to support the claim.</li> <li>• The essay recognizes and addresses conflicting/counterevidence.</li> </ul>
Contextualization of evidence	<p>Contextual knowledge is used to situate and evaluate the evidence available:</p> <ul style="list-style-type: none"> <li>• In contextualizing evidence and topic, the essay recognizes historical perspectives and demonstrates an understanding of causation.</li> <li>• The essay uses sources in a manner that is consistent with the contemporary meaning of the sources for the original audience at the time and place of their creation.</li> </ul>

## Evaluation

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Daily Class Preparation and Contributions to Class Discussion	5%
Unit 1 Writing Assignments	15%
Unit 2 Writing Assignments	15%
Unit 3 Essay	20%
Unit 4 Essay	20%
Research Project	25%

## Class Preparation and Contributions to Class Discussion

See the grading rubric below for standards regarding this portion of the grade:

### GRADING RUBRIC FOR DAILY PORTION OF GRADE

GRADE	CRITERIA
A	Student attends every class session and arrives promptly; Student participates frequently in most class sessions and makes relevant contributions to discussions; Student is always well prepared for class; Student actively listens when others talk and “builds off” the ideas of others; Student always shows respect for classmates and instructors; Student always meets deadlines for assignments.
B	Student misses no more than one class session and is almost never late; Student regularly participates in most class sessions and makes relevant contributions to discussions; Student is prepared for class; Student actively listens when others talk; Student shows respect for classmates and instructors; Student always meets deadlines for assignments.
C	Student misses no more than two class sessions and is seldom late; Student occasionally participates in class sessions and makes some relevant contributions to the discussion; Student is usually prepared for class; Student listens when others talk; Student shows respect for classmates and instructors; Student turned in no more than two late assignments.
D	Student misses more than two class sessions or frequently arrives late; Student seldom participates in class sessions and rarely makes relevant contributions to the discussion; Student is seldom prepared for class; Student rarely listens when others talk; Student turned in more than two late assignments.
F	Student misses more than three class sessions or rarely arrives on time; Student almost never participates in class sessions and rarely makes relevant contributions; Student is rarely prepared for class; Student almost never listens when others talk; Student regularly misses deadlines. <i>Note that a student who misses more than six classes risks failure of the entire course.</i>

### Unit Writing Assignments:

These written assignments will vary for each unit. In general, they will require you to evaluate specific materials addressed in each unit using appropriate citation methods. Assignment formats and lengths may vary from one well-written paragraph to a longer essay of 5-7 pages, typed. Specific instructions will be provided well in advance of due dates. We will be discussing drafts of these assignments in class writing workshops designed to help you revise and improve your analysis and communication skills.

### **Research Project:**

This project will be ongoing throughout the semester. We will be working with documents in our University Archives that document the history of technology. You will do research to contextualize the document and write a 500-700 word report based on your research findings. You will learn how to:

- locate and evaluate appropriate scholarship,
- historically contextualize your document using scholarship,
- use writing and revision as an iterative process for improving your analysis, and
- document your research

## Course Policies

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### **Academic Integrity**

UNCG considers academic dishonesty to be a serious offense. Dishonest behavior in any form, including cheating, plagiarism, deception of effort, and unauthorized assistance, may result in such sanctions as a failing grade on an assignment or failure in the course depending on the nature of the offense. Students must follow the guidelines of the University Policy on Academic Integrity: <http://academicintegrity.uncg.edu/complete/>

### **Electronic Communication**

Students are responsible for checking Blackboard and UNCG email on a regular basis. Students are encouraged to utilize email and other forms of digital communication when interacting with the instructor (lctolber@uncg.edu). When using email, students are to be professional and courteous. Students should also remember email is an asynchronous form of communication. Thus, while a prompt response may be desired, it may not always be possible (especially late at night and on weekends). Students should allow at least 24 hours (48 hours on weekends) for a response. That said, the instructor answers emails in the timeliest fashion possible.

### **Late Assignment Penalty**

Meeting deadlines is essential for your learning and success in this class. Please note that *unless arrangements have been made well in advance of due dates*, late assignments will be penalized by a 3% reduction in the final grade for every day the assignment is late. Assignments later than one week will not be accepted for credit without an extremely impressive explanation. The unit assignments are designed to develop your learning in progressively more difficult analytical challenges. It is essential that you complete this work on schedule.

### **Attendance Policy**

Attendance is mandatory and is counted as part of the overall participation grade. Documentation for absences will not be collected except in cases where an extended absence may be necessary (for example, hospitalization). Note that beyond the role attendance plays in the grading rubric above, *a student who seriously neglects attendance and class preparation risks failing the course*. I will take attendance at the beginning of every class. You must attend at least three quarters of the class period to be counted for full attendance for the class.

# Course Schedule

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January 9

Introductions

## Unit 1. What is Technology? Considering the Axe and the Personal Computer

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January 11 Can We Define “Technology?”

Read: Nye, Chapter 1

January 16 Exploring contemporary meanings of technology/Writing Workshop.

**Writing Assignment:** Read the local Greensboro newspaper (<http://www.greensboro.com/>) and explain two different meanings of “technology” that you detect anywhere in the issue. Try to find examples from different sections of the newspaper. Post two well-written paragraphs to the Discussion Board with a link to the story (or stories) you wrote about. Use specific examples from Chapter 1 in Nye to develop your analysis of the meanings of technology. **Post your paragraphs to the Discussion Board in Canvas by noon on January 15.**

January 18 Technology and American Identity: The Case of the American Axe

Read: Gary Kulik, “American Difference Revisited: The Case of the American Axe”

January 23 Writing Workshop: Reading Historical Scholarship

**Writing Assignment:** Post your evaluation of the Kulik essay to the Discussion Board by noon on January 22. See instructions posted to Canvas.

January 25 Does Technology Control Us?

Read: Nye, Chapter 2

Selected readings on the history of the personal computer posted to Canvas

January 30 Is Technology Predictable?

Read: Nye, Chapter 3

Selected readings on the history of the personal computer posted to Canvas

**Writing Assignment:** Choose one of the questions we have just discussed: Does Technology Control Us?, or Is Technology Predictable? and use the assigned reading to answer the question. **Post your one-page essay to Canvas by noon on January 31.**

February 1 **Writing Workshop: Applying the Benchmarks of Historical Writing**

## Unit 2. Pre-Industrial Technology

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February 6 How Do Historians Understand Technology?

Read: Nye, Chapter 4

February 8 Household Work and Household Tools Under Pre-Industrial Conditions

Read:

Judith A. McGaw, "So Much Depends Upon a Red Wheelbarrow" (posted to Canvas)

February 13 Probate Inventory Case Study: Were pre-industrial households self-sufficient?

Read:

William Byrd, "...to set all the springs in motion," 1726 (posted to Canvas)

A Virginian describes his self-sufficient plantation (posted to Canvas)

A Plantation Accounting (posted to Canvas)

**Writing Assignment:** Write an analysis of your probate inventory. Was this household self-sufficient? Use the assigned reading to contextualize your probate inventory. **Post your 1-page analysis to Canvas by noon on Feb 14.**

February 15 **Writing Workshop: Contextualizing documents**

February 20 Cultural Uniformity, or Diversity?

Debate over Manufactures in the Early Republic: Primary Sources

Read: Nye, Chapter 5

Selected documents: Thomas Jefferson, Tenche Cox, Alexander Hamilton, Thomas Cooper (posted to Canvas)

February 22 Debate Over Manufactures in the Early Republic: Historians

Read:

Leo Marx, The Machine (posted to Canvas)

John R. Nelson, "Manufactures" Reconsidered (posted to Canvas)

**Writing Assignment:** Debate Over Manufactures Essay. Use Primary and Secondary Sources to explain the historical significance of the debate over manufactures in the early republic. **Post to Canvas by noon on Feb. 26.**

February 27 **Writing Workshop: Applying the Benchmarks of Historical Writing**

March 1 Sustainable Abundance, or Ecological Crisis?

Read: Nye, Chapter 6

March 6/8 Spring Break

## Unit 3: Industrialization

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March 13 **Research Project Workshop**  
Meet in Hodges Reading Room (Library)

March 15 Steam, Space, and a New World Order

Read: documents and historical essays about the history of the railroad posted to Canvas

March 20 Work: More, or Less? Better, or Worse?

Read: Nye, Chapter 7

March 22      **Inside the Factory System**

Read: documents and historical essays about the history of the factory system posted to Canvas

March 23      **Research project bibliography and topic description due**

**Writing Assignment: Unit 3 Essay due by noon on March 26.**

March 27      **Writing Workshop: Unit 3 Essay**

## Unit 4. Twentieth-Century Technologies

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March 29      **Housework and household tools under industrial conditions**

Read: Cowan, *More Work for Mother* (posted to Canvas)

April 2      **Writing Assignment: Submit draft research project by noon on April 2.**

April 3      **Writing Workshop: Research Project**

April 5      **More Security, or Escalating Dangers? Expanding Consciousness, or Encapsulation?**

Read: Nye, Chapters 9 and 10

April 10      **Case Study: Communication Technologies and Social Control, 1874-1914**

Read: documents and historical essays on telephony posted to Canvas

April 12      **Should “the Market” Select Technologies?**

Read: Nye, Chapter 8

April 17      **The Social Construction of the Automobile, 1908-1941**

Read: documents and historical essays on the automobile posted to Canvas

April 18      **Writing Assignment: Unit 4 essay draft by noon on April 18.**

April 19      **Writing Workshop: Unit 4 Essay**

**Not Just One Future**

Read: Nye, Chapter 11

April 24      **Unit 4 Essay and Final Research Project draft due. Last Class Meeting**