

# Schedule of Topics and Readings

## Week 1: Introduction

8/24 Course Overview

8/26 Cultural Attitudes toward Technology -- Introductory Examples: Utopianism, Determinism, and Romanticism

**Assignment: Two-Page Introductory Essay [Due 9/2]**

## Week 2: Views of Technological Change: Looking at the Distant Past

8/31 Ancient Technologies: Contemporary Values and Reconstructing the Past

9/2 The Dark Ages? Technological Worlds around the Globe in the Medieval Era

**[Two-Page Introductory Essay Due at the Beginning of Class]**

Reading: Pacey, *Technology in World Civilization*, pp. 1-57; Alexander Stille, "The Sphinx, Virtual and Real" – excerpt from *The Future of the Past* **[handout]**

## Week 3: Conquest, Empire, and Industry: Technological Considerations

9/7 The Technologies of Renaissance and Revolution

9/9 The Circulation of Technical Knowledge, Products, and Power in the Modern Era

**Reading:** Pacey, *Technology in World Civilization*, pp. 58-130; David Nye, "How Do Historians Understand Technology?" pp. 49-66 from *Technology Matters: Questions to Live With* (MIT Pr, 2006) **[access on e-reserve]**

## Week 4: Technological Encounters across World Regions

9/14 Case Study of How Technology "Moves": Railroads

9/16 *Workshop:* Political, Commercial, and Ethical Questions in the Development of 21<sup>st</sup>-century Technologies from a Global (rather than National) Perspective

**[Take-Home Essay Exam #1 Questions Given Out / Due 9/23]**

**Reading:** Pacey, *Technology in World Civilization*, pp. 131-207; Daniel Sarewitz, excerpt from "Pas de Trois: Science, Technology, and the Marketplace" pp. 131-140 from *Frontiers of Illusion: Science, Technology, and the Politics of Progress* (Temple U Pr, 1996) **[access on e-reserve]**

## Week 5: Classic Themes: Technology and War

9/21 Industrial Development and the Future of War in the 19<sup>th</sup> Century

9/23 Ironclad Icons

**[Take Home Essay Exam #1 Due at the Beginning of Class]**

**Reading:** Mindell, *War, Technology and Experience*, pp. 1-60

## Week 6: Classic Themes: Technology and "the Modern"

9/28 Responses to New Technologies in the 19<sup>th</sup>c: "The Shock of the New"?

9/30 Responses to New Technologies Today: "The Shock of the Old"?

**Reading:** Mindell, *War, Technology and Experience*, pp. 61-150; excerpt from David Edgerton, *The Shock of the Old: Technology and Global History since 1900* (Oxford U Pr, 2007) **[access on e-reserve]**

## Week 7: The Social and Cultural Contexts of Modern Technologies

10/5 *Workshop*: Comparing “War, Technology, and Experience” in the Light of Recent History -- The Persian Gulf War (1990-1991)

[Take-Home Essay Exam #2 Questions Given Out / Due 10/14]

10/7 Responses to New Technologies in the post-Civil War US: Edison’s America

**Reading:** Carroll Pursell, “War in the Age of Intelligent Machines,” from *White Heat: People and Technology* (UC Pr, 1994), pp. 144-167 and Samuel C. Florman, “War, Peace and Freedom,” from *The Introspective Engineer* (St. Martin’s Pr, 1996), pp. 67-80 [access both on e-reserve]

**Reading:** Collins and Gitelman, *Thomas Edison*, pp. 1-36; Thomas P. Hughes, “Introduction: The Technological Torrent,” pp. 1-12 in *American Genesis: A Century of Invention and Technological Enthusiasm* (Penguin Books, 1989) [access on e-reserve]

## Week 8: The Inventor as Culture Hero

10/12 America’s Edison

10/14 The Independent Inventor circa 1900: Comparison of Edison and the Wright Brothers (Film: *The Wright Stuff* / PBS)

[Take-Home Essay Exam #2 Questions Due at the Beginning of Class]

**Reading:** Collins and Gitelman, *Thomas Edison*, pp. 36-127

## Week 9: Machine-Made America

10/19 The Independent Inventor circa 1930: Comparison of Edison, the Wrights, and Philo Farnsworth (Film: *Big Dream, Small Screen* / PBS)

10/21 *Workshop*: Edison Documents

[Take-Home Essay Exam #3 Questions Given Out / Due 10/28]

**Reading:** Collins and Gitelman, *Thomas Edison*, pp. 128-187; Strasser, *Waste and Want*, pp. 21-52

## Week 10: Work and Waste: Taylored Lives

10/26 Technology and the Push for Efficiency, Productivity, and Systems

10/28 Social Ramifications: Waste and Want (Film: *The Electric Home* / Buster Keaton, 1922)

[ Take-Home Essay Exam #3 Questions Due at the Beginning of Class]

**Reading:** Strasser, *Waste and Want*, pp. 69-140; Thomas P. Hughes, “The System Must Be First,” pp. 184-220 in *American Genesis: A Century of Invention and Technological Enthusiasm* (Penguin Books, 1989) [access on e-reserve]

## Week 11: Technologies of Abundance and Affluence

11/2 Technology & Consumption: The Rising Standard of Living

11/4 Comparative Case Study: China (Film: *World in the Balance: China Revs Up*)

**Reading:** Strasser, *Waste and Want*, pp. 161-201; Thomas P. Hughes, excerpt from “Taylorismus + Fordismus = Amerikanismus,” pp. 249-278 in *American Genesis: A Century of Invention and Technological Enthusiasm* (Penguin Books, 1989); Ruth Schwartz Cowan, “Less Work for Mother?” from Albert H. Teich, ed., *Technology and the Future*, 7<sup>th</sup> ed., (St. Martin’s Pr, 1997) [access the latter two on e-reserve]

## Week 12: The Global Dynamics of the After-effects of Technological Innovation and Mass Consumption

11/9 Computer Lab Session – Exploring Global Garbage

11/11 *Workshop: Waste on a World-wide Scale*

[Take-Home Essay Exam #4 Questions Handed Out / Due on 11/18]

**Reading:** Strasser, *Waste and Want*, pp. 229-293; Elizabeth Royte, excerpt from “The Ecological Citizen,” pp. 281-289 from *Garbage Land: On the Secret Trail of Trash* (Little, Brown, 2005)

## Week 13: What’s New about “New” Media?

11/16 From “Do Not Fold, Spindle or Mutilate” to Personal Computing

11/18 *Workshop: Digital Reproduction and Reassessing Intellectual Property Issues*

[Take-Home Essay Exam #4 Due at the Beginning of Class]

**Reading:** Vaidhyathan, *Anarchist in the Library*, Introduction and pp. 1-64

## Week 14: Binary Options?

11/23 The Open Source Movement: More than Digital? (Film: *Revolution OS*)

[Two-Part Take-Home Final Essay Exam Questions Handed Out / Due on 12/15]

11/25 NO CLASS -- THANKSGIVING HOLIDAY

**Reading:** Vaidhyathan, *Anarchist in the Library*, pp. 65-95

## Week 15: Technology’s Children: Growing Up Digital

11/30 Utopianism, Determinism, and Romanticism Revisited. Case Study: Film: *digital\_nation* / PBS

12/2 *Workshop: Using Historical Concepts to Reflect on Current Realities*

**Reading:** Vaidhyathan, *Anarchist in the Library*, pp. 97-130 & Conclusion (chapters 9-11 optional); David Nye, “Not Just One Future” pp. 209-226 from *Technology Matters: Questions to Live With* (MIT Pr, 2006) [access on e-reserve]

## Week 16: The Past and Future of Technological Change: Conclusions

12/7 Conclusions: Where Do We Go From Here?

12/9 Final Essay Consultations

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**Final Take-Home Essay Exam Due:  
WEDNESDAY, December 15<sup>th</sup> 1:30-3:30  
in our classroom**