TECHNOLOGY IN MODERN AMERICA

INTRODUCTION:
The past six decades have witnessed a torrent of technological change that has profoundly altered the everyday lives of Americans. Where do these technologies come from? (I find it incredible that anyone can make microchips) Is their arrival and impact predictable? (Even Bill Gates missed the significance of the World Wide Web) Does anybody really control technology? (Like Christmas, is it run by a big Eastern syndicate?) Is technological change a zero-sum game; that is, for each winner there is an equal and opposite loser? (Is it all a capitalist plot to take away our jobs?) Does new technology enhance or constrain freedom? (What becomes of privacy when video cameras are everywhere? Or when the government monitors all your phone calls, travel, and expenditures?) Do new technologies carry out the schemes of their designers or do people subvert them to their own ends? (Did satellite TV and VCR's undermine the Soviet Union?) Finally, how have new technologies changed the way people live their lives? (What did people do before TV?) These are questions that will shape our discussion.

Another key issue is the pattern of technological change. Each historical epoch, in retrospect, appears to consist of a bounded territory in which some things are feasible and others are not. However, it is equally remarkable how fluid these boundaries can become during times of crisis, such as the Great Depression, World War II, the US response to Sputnik, the democratic revolution of the 1960s, the energy and environmental crises of the 1970s, and, perhaps, September 11, 2001. The fact that crises sometimes lead to bursts of innovation suggests that the constraints on technological change are not only technical, but social, political, or even intellectual as well.

GRADING:
Midterm Exam 25%; Quizzes and in class assignments 25%; Research Paper 15%; Final Exam 35%

EXAMS:
The exams are in an essay format. Each exam consists of longer and shorter essays that require the student to analyze and synthesize the material in that section of the course.

The final exam will consist of a third hourly exam and several comprehensive questions that cover the entire time period of the course.

MAKE UP EXAMS
Make up exams will only be given to students with legitimate excuses who notify me ON/
OR BEFORE THE DAY OF THE EXAM. In case of an emergency an e-mail message will suffice.

READING ASSIGNMENTS:
The reading assignment for each class supplements, not duplicates, the lecture. There is no textbook for this class. **Students are responsible for the reading on the day it is assigned and may be called upon to explain particular aspects of it. There may be a quiz on each assigned reading.**

RESEARCH PAPER:
Each student will write a 5-7 page paper on a particular technology using the *New York Times Historical Newspapers*, a searchable data base. Your paper must be based only on the articles you find in the *New York Times*. You get to be the historian using these articles as your evidence. Use of any other sources (for example, websites) is not acceptable and will result in a zero in the assignment. Uncited material from sources other than your articles is plagiarism, which will result in disciplinary action.

REQUIRED BOOKS:

Jennet Conant, *Tuxedo Park*
Mary Ann Watson, *The Expanding Vista*
Elizabeth Siegel Watkins, *On the Pill*
Michael Riordan and Lillian Hoddeson, *Crystal Fire*

SCHEDULE:

Jan. 17 Introduction

Jan. 19 Mass Production, Consumption and Culture in the 1920s

Jan. 24 Science and Technology in the 1920s
  *Conant, Chaps. 1-4*

Jan. 26 Technology and the Great Depression
  *Conant, Chaps. 5-7*

Jan. 31 Popular Science and Technology
  The 1939 World’s Fair

Feb. 2 World War II
  *Conant, Chaps. 8-12.*

Feb. 7 World War II

Feb. 9 The Atomic Bomb
Feb. 14  Post War Dreams and Nightmares
Feb. 16  Cold War
Feb. 21 Synthetics
Feb. 23  Medicine
Feb. 28 Birth Control Pill
   Watkins, entire book

Mar. 2 Midterm Exam

Mar. 14  Computers
Mar. 16  Space
Mar. 21  Television
   Watson, entire book
Mar. 23  Silent Spring
Mar. 28  Agriculture
Mar. 30  Environmental Movement

Apr. 4 Transistors and Chips
   Riordan and Hoddeson, entire book
Apr. 6  Personal Computers I
Apr. 11  Personal Computers II
Apr. 13  Japan, Inc.—Automobiles and Consumer Electronics
Apr. 18 Modern War: Star Wars and Precision Guided Munitions
Apr. 20 Internet
Apr. 25 Pharmaceuticals
Apr. 27 Conclusion