Brief Course Description

This class explores the relationships between technology and socio-economic world. Even though technology plays a fundamental role in even our most intimate activities, few of us reflect upon how technology develops or why it develops in the ways it does. The purpose of this course is to acquire a theoretical and historical understanding of how technology evolves and then use these understandings to examine some topics of technological development and contemporary society. By the end of the course, my hope is that you will have a better understanding of why our everyday technologies have evolved in the way they have. I also hope you will have a better understanding of the fact that we can affect this evolution.

We are constantly creating new things for our use and abuse. These objects create new needs such as for a radio, a fax machine, a cell phone, side-impact air bags, designer drugs, etc. And yet, we know little about why and how these artifacts came to populate our world and structure our lives. In the modern era, when we perceive a problem, then we call upon our technologists to solve it. Technical fixes are a preferred remedy. Even when there is no problem, businesses are trying to create new needs and define new problems. However, technologies are not neutral, they have politics, social structures, and many other things designed into them. The technologies that a group or society uses tell us much about that society, and we often measure other societies by their technologies. Finally and most important, technological artifacts shape our lives and are powerful forces in determining our actions.

Required Readings

1. All readings are on the class Smartsite web page under “Resources.”
2. Large parts of one book are required (you can buy it on Amazon or I have scanned the assigned portions and they are on class website):

Grading

Your grade will be given on the basis of the following products:

1. Four unannounced quizzes (drop one - 10% each) 30%
   Quizzes missed cannot be made-up. However, the lowest one will be dropped. The quiz is given at the beginning of class any student more than 10 minutes late will not be allowed to take the quiz (no exceptions)

2. Paper (due on day of final) 60%
   All students are expected to make a five-minute presentation on their research. If you do not make this presentation your grade will be lowered by one full grade, i.e. B becomes C etc.

3. Classroom discussion (I call on students in class randomly!) 10%
   TOTAL 100%

Student Code of Conduct
All students should be familiar with the Student Code of Academic Conduct that is located here [http://sja.ucdavis.edu/cac.html](http://sja.ucdavis.edu/cac.html). Please review this carefully and ask your instructor, if you have any questions. Remember the instructor is obliged to refer you to Student Judicial Affairs in all cases of violation or suspected violation.

In addition to the well-known cases of plagiarism and cheating on examinations, it is also a violation of the Code of Conduct to use your own written materials from papers prepared for other classes, unless you take the following points into consideration.

It is permissible to use materials and texts from other class projects, within CRD or in other departments, under these conditions:
1. You inform the instructor beforehand.
2. You clearly identify the portions where you quote yourself (or collaborative work)
3. You provide a copy of the previous work you have submitted in the other class to the instructor.
4. To ensure that you receive a good grade make sure that it fits seamlessly into the assignment for THIS class.
5. If you have any doubts about the extent to which you can use already written materials, the talk to the instructor or the TA prior to making any submission.

**Assignments**

The quiz and paper are the key to success in the class. The following is a short description of the various grade-related issues:

**Quizzes:** There will be four unannounced quizzes, you may drop the lowest one. If you miss the class or are more than 10 minutes late that was your choice and there will be no make-up. They may include short answers, multiple choice, and fill-in the blank questions. The quiz will cover the readings and lectures for the previous two classes and the class of the day of the quiz.

**Final Paper:** The final paper is meant to acquaint you with the history of a technology in more depth than you would otherwise get. Any technology or artifact is acceptable for the paper. Given that the paper is 60 percent of the grade, it should be approximately fifteen pages in length. For the paper you will choose any product or item you wish and you will trace its evolution through time. The integration of the readings into the paper is mandatory. Any paper that does not integrate the readings will receive no higher than a C -- the better the integration, the higher the grade. I have posted previous “A” papers on the class website on My UCDavis.

**Presentations:**

On the last two days of the quarter, students will be expected to make a five-minute presentation on their research paper. This is not graded, but I am a stickler on you doing a good job on this.

Topics that are not to be done because we discuss them in great detail during class include: bicycles, cameras, and Teflon.

Please do not put any covers etc. on the papers. The paper should begin with a title page giving your name, the class, date, instructor etc.

Excellent past papers will be provided to you.
VERY IMPORTANT: To encourage you to make a decision as soon as possible, I would like a one-paragraph description of your topic choice on October 15, 2012. I will evaluate each of your choices. Not handing this in on time will be an automatic "F" for 10 percent of the total paper grade (to be subtracted from the 60 percent).

The paper should be typed double-spaced on one side of the page. Please use a normal typeface and a 10 or 12 pitch. References to any written materials should be in footnotes or embedded citations (Kenney 1998:2). Everyone must provide an electronic copy of the paper emailed as an attachment. However, a hard copy is also required. The paper will be due on the date of the final examination as published in the catalog.

Required Readings

Readings are an essential part of the course and, though not necessarily duplicated in the course lectures, are a necessary background for discussion. They will be necessary to adequately participate in the class and you will be responsible for knowing this material for quizzes.

Monday, October 1 – Introduction and hand out syllabus etc.

Wednesday, October 3 – Technology and Intellectual Property

From the U.S. Patent and Trademark Office please read:

1. What is a patent?
3. What can be patented?
4. Novelty and other conditions for obtaining a patent

The URL is: http://www.uspto.gov/web/offices/pac/doc/general/


Please play around with Google Patent. Check out patents from 1820 and today to see how they were written.

Monday, October 8 – Standards, Path Dependence, and Lock-In


Wednesday, October 10 – Marx on Technology


**Monday, October 15 – Technology and Politics Hand In Paper Topic**


Gaby Wood. 2007. “From the Web to the White House.” *Observer* (July 8) pp. 6

**Wednesday, October 17 – Evolution Illustrated**

The articles in this section are illustrations of how technologies evolve.


**Monday, October 22 – Technological Evolution**


**Wednesday, October 24 – Selection**


**Monday, October 29 – Social Construction of Technology**


**Wednesday, October 31 – Social Construction Examples**


Monday, November 5 – Social Construction of Technology in Sport


Monday, November 19 – Technological Spectacles and the Creation of Legitimacy


Wednesday, November 7 – Technology and the Military


New reading or drop section

Monday, November 12 – Holiday, No class.

Wednesday, November 14 – China, Technology and Imperialism


**Wednesday, November 21 -- Technology and Food**


**Monday, November 26 – Socially Constructing the Problem of Global Climate Change**


**Wednesday, November 28 – Universities, Technology and Commercialization**


**Monday, December 3 – STUDENT PRESENTATIONS**

**Wednesday, December 5 – STUDENT PRESENTATIONS**