

History of Science 180 - Fall 2008
First-Year Honors Seminar:
Technology in the 1960s, from Sputnik to the Counterculture

6109 Social Science, 1:20-3:15 Wednesday

Professor:	Eric Schatzberg	Office Hrs:	Wed 3:30-4:30 or by appt.
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Description:

This first-year honors seminar examines technology in the 1960s, focusing on radically changing public attitudes. The seminar spans the "long 1960s," from the launch of the first artificial satellite Sputnik in 1957 to the resignation of president Richard Nixon in 1974. The period began with expectations of flying cars, domed, climate-controlled cities, and commercial flights to the moon. It ended with growing protests against nuclear power and disaffected youth moving to communes in the country. By the early 1970s, scientists and engineers felt constantly criticized, no longer regarded as heroes by the public.

This seminar is designed to introduce students to advanced modes of reading, analysis and writing typical of honor courses in the humanities. The course is organized as a small seminar devoted almost entirely to discussion. The seminar is a classic form of education that promotes learning as a cooperative enterprise rather than as one-way transmission of information from instructor to student. This course does not aim to give you mastery of a well-established set of historical facts, but rather to show you different ways to think about and study historical questions.

But I do have definite pedagogical goals. The main goal is learning how to read. Of course, you all know how to read already, but in this seminar we will learn how to read different types of sources critically, from popular news stories to academic research articles. Reading critically is about learning to assess the strengths and weaknesses of a particular piece of writing in light of the purposes for which it was written. Reading critically also means making connections between readings, connections that often go unnoticed by the authors themselves.

The second pedagogical goal is to introduce you to scholarly research skills required for advanced undergraduate work in the humanities and social sciences. We will learn how to find relevant sources using the rich electronic resources of the UW libraries.

My third pedagogical goal is to help each of you develop better skills in scholarly writing. Although this is not a writing-intensive course, it does require a moderate amount of written work, at least a little every week.

Requirements:

Read, write, watch and talk. These are the only requirements for the course.

Reading. Every week there will be a reading assignment, often a mix of different types of sources. I have tried to choose well-written, accessible works, but a few of the readings are rather difficult. You need to give yourself enough time to read carefully.

Writing. Each week we will also have a writing assignment. There is no better way to encourage critical reading than by writing about what you read. Most

assignments will be no more than a page, though a few will be a bit longer. I will send out the assignment each week by email.

Watching. We will watch several TV documentaries in class, and two full-length Hollywood films. I will arrange for a screening of the films in the evening.

Discussion. Participation in class discussions is essential to success of the seminar. Every seminar participant should try to make at least one substantive contribution to each week's discussion. You will, of course, need to arrive prepared for every class in order to participate. If you are ill or are just having trouble coping, please talk to me about it before class, and I'll give you a break.

Email list. I use the class email list as the principal means for providing the class with the weekly assignments and other important information; please check it regularly. Students should also feel free to contribute comments to the list, for example to make a point that you did not get an opportunity to raise during discussion. The address of the list is: histsci180-1-f08@lists.wisc.edu.

Course Readings:

With the possible exception of Arthur C. Clarke's novel version of *2001, A Space Odyssey*, there are no assigned books for this course. All readings will be available in a course packet, which will be in two parts. Part 1 of the packet will be for sale in the History of Science department office, 7143 Social Science (262-1406); the office is open from 8:00 am to 5:30 pm through September 11; and from 8:00 am to 3:00 pm thereafter. The cost of the packet is \$30, cash or check. **The packet is not returnable, even if you drop the class.**

I will place a copy of the packet on reserve at College Library, but it is not yet available. If you need access to the reserves copy before it becomes available, please let me know and I will lend you one.

Religious Holidays and ADA Notice:

You may take off any religious holidays you want, as long as you let me know in advance and make up the work. I try not to schedule tests on the more popular religious holidays. Contrary to popular belief, the Tuesday and Wednesday before Thanksgiving are not holidays.

If you have a disability that might adversely affect your performance in this course, let me know, and I'll do my best to accommodate you. For more information, contact the McBurney Disability Resource Center, 263-2741.

Freaking Out:

College life often involves a lot of stress. If you feel like things are getting out of hand, either for personal or academic reasons, please contact the Counseling and Consultation Service, part of the University Health Service, 115 North Orchard Street, 265-5600. For more information, see <http://www.uhs.wisc.edu/ex/counseling/>.

Course Outline

Week 1 (9/3) - Introduction: Postwar Technological Enthusiasm

Overview of the course and introduction to key themes. Understanding post-WWII enthusiasm for science and technology.

Readings (in class): Alan Dunn, "Utopia--1955," *Saturday Evening Post*, 30 Dec. 1944, 36-37;

Thomas E. Stimson, "Shall We Move to Another Planet?" *Popular Mechanics* 98 (August 1952): 65-69+.

Week 2 (9/10) - The Legacy of WWII--Atomic Bomb and the Cold War

Two linked legacies of WWII, one technological and the second political, profoundly shaped the postwar era. First was the creation of a radical new technology, the atomic bomb. Second was the emergence of a new international order based on two new superpowers, USA and USSR. This new order quickly developed into a tense military, economic and ideological competition, the Cold War.

Readings: Norman Rosenberg and Emily Rosenberg, *In Our Times: American Since World War II*, 6th ed. (Upper Saddle River, NJ: Prentice Hall, 1998), 1-53 (chaps. 1-2); Allan M. Winkler, *Life Under a Cloud: American Anxiety About the Atom* (Urbana: University of Illinois Press, 1999), 9-33, 57-83 (chaps. 1, 3).

Assignment: reading response (see email for details); complete the Campus Library User Education (CLUE) online tutorial at <http://clue.library.wisc.edu/>.

Week 3 (9/17) - Sputnik and the Space Race, 1

Origins of the "space race"; the launch of Sputnik and American reactions.

Reading: Paul Dickson, *Sputnik: The Shock of the Century* (New York: Walker & Co., 2001), 1-27, 49-107;

Walter A. McDougall, *The Heavens and the Earth: A Political History of the Space Age* (New York: Basic Books, 1985), 137-156;

Howard E. McCurdy, "The Cold War," chap. 3 in *Space and the American Imagination* (Washington, DC: Smithsonian Institution Press, 1997), 53-82.

Assignment: reading response.

Week 4 (9/24) - Sputnik and the Space Race, 2

Analyzing public opinion; research in primary sources; reading scholarly article.

Readings: Kim McQuaid, "Sputnik Reconsidered: Image and Reality in the Early Space Age," *Canadian Review of American Studies/Revue canadienne d'études américaines* 37, no. 3 (2007): 371-401;

Assignment: find and an article written between the launch of Sputnik and the end of 1958 discussing the influence of Sputnik on some aspect of American society, politics or culture. Write a one-page discussion of this article. (See handout for detailed instructions.)

Week 5 (10/1): Space Race 3 - Going to the Moon

Kennedy, Johnson, and Project Apollo; technology for prestige.

Reading: McDougall, *The Heavens and the Earth*, 301-324, 361-388;

McCurdy, "Apollo: The Aura of Competence," chap. 4 in *Space and the American Imagination*, 83-107.

Assignment: reading response.

Week 6 (10/8): Science, Technology, and Sexual Politics: The Pill

The emergence of a key medical "technology" of the 1960s.

Reading: Lara V. Marks, *Sexual Chemistry: A History of the Contraceptive Pill* (New Haven: Yale University Press, 2001), 1-115.

Video- "The Pill," American Experience (PBS)

Assignment: reading response.

Week 7 (10/15) - Reception and Impact of the Pill

Sex, morality, religion, and medical safety.

Readings: Elizabeth Watkins, *On the Pill: A Social History of Oral Contraceptives, 1950-1970* (Baltimore: Johns Hopkins University Press, 1998), 53-131 (chaps. 3-5);

Marks, "Divisive Device: The Pill and the Catholic Church," chap. 9 of *Sexual Chemistry*, 216-236.

Assignment: short thought piece (up to 2 pages) focusing on a specific aspect of the impact of the Pill.

Week 8 (10/22) - Enthusiasm Challenged: The New Environmentalism

Rachel Carson on pesticides.

Readings: Linda Lear, "Introduction" in Rachel Carson, *Silent Spring*, x-xiv;

Rachel Carson, *Silent Spring*, 1-37, 154-179, 187-198, 245-297.

Video (in class): *Rachel Carson's Silent Spring*, 1993.

Assignment: reading response--is Carson anti-technology?

Week 9 (10/29) - Environmentalism Continued

Carson versus the chemical industry.

Reading: Maril Hazlett, "'Women vs. Man vs. Bugs': Gender and Popular Ecology in Early Reactions to *Silent Spring*," *Environmental History* 9 (Oct. 2004): 701-729;

President's Science Advisory Committee, *Use of Pesticides: A Report* (Washington: GPO, 1963);

Kenneth V. Thimann, "Pesticides and the P. S. A. C.," *BioScience* 14, no. 11 (Nov. 1964): 24-25, available here:

<http://www.jstor.org.ezproxy.library.wisc.edu/stable/pdfplus/1293323.pdf>.

Assignment: find two reviews of *Silent Spring* in scientific or technical journals. Write up a two-page discussion and analysis of the reviews you find.

Week 10 (11/5) - Nuclear Fear Weakens: Dr. Strangelove

Kubrick's 1964 satire about nuclear war, *Dr. Strangelove*, marks a turning point in cultural attitudes towards postwar technology and science.

Reading: Winkler, "Fear of Fallout," chap. 4 in *Life Under a Cloud*, 84-108;

Charles Maland, "Dr. Strangelove (1964): Nightmare Comedy and the Ideology of Liberal Consensus," *American Quarterly* (Winter 1979): 697-717;

Reviews of *Dr. Strangelove* in *The New York Times* (Jan. 30, 1964, 4; Feb. 16, 1964, X1; March 1, 1964, X8).

Film: *Dr. Strangelove* (1964). Screening Monday, 11/3, 6 pm, 254 Van Hise.

Assignment: film analysis.

Week 11 (11/12) - Questioning Consumption: Is More Better?

Critiques of consumer society; Ralph Nader and auto safety.

Reading: John Kenneth Galbraith, *Affluent Society* (Boston: Houghton Mifflin, 1958), 1-6, 152-160 (chaps. 1, 11);

Ralph Nader, *Unsafe at Any Speed: The Designed-In Dangers of the American Automobile* (1965), vii-x, 1-32, 65-118 (preface, chaps. 1, 3).

Assignment: reading response.

Week 12 (11/19) - Radical Critiques of Technology: Philosophers and the New Left

Is technology a threat to freedom?

Reading: Students for a Democratic Society, *The Port Huron Statement*, 1962 (Chicago: Charles H. Kerr, 1990), 6-36, 60-62, 75-77;

Herbert Marcuse, *One-Dimensional Man: Studies in the Ideology of Advanced Industrial Society* (Boston: Beacon Press, 1964), ix-xvii, 1-18 (Introduction and chap. 1);

"Marcuse Defines His New Left Line," *New York Times Magazine*, Oct. 27, 1968, 29+

Video: selections from *Herbert's Hippopotamus: Marcuse and Revolution in Paradise* (1996)

Week 13 (11/26) - Technowar in Vietnam and its Critics

Vietnam War as a problem of technology.

Reading: Marilyn B. Young, "The War In America (1965-1967)," chap. 10 in *The Vietnam Wars, 1945-1990* (New York: HarperCollins, 1991), 192-209;

James William Gibson, "Technowar at Ground Level: Search and Destroy as Assembly Line," in *The Perfect War: Technowar in Vietnam* (New York: Atlantic Monthly Press, 1986), 93-154

Gabriel Kolko, "The War on Campus: Untangling the Alliances," *The Nation* 205 (Dec. 18, 1967): 6454-8.

Week 14 (12/3) - An Ambiguous Vision: 2001, A Space Odyssey (1968)

Another great Kubrick film captured the increasingly ambivalent attitudes toward technology just before the Apollo moon landing. I'm proposing that we also read Clarke's novel that was written with Kubrick for the film, but it's almost 300 pages long. We'll discuss whether we want to do this.

Reading: Robert Poole, "Film in Context: 2001, A Space Odyssey," *History Today* 51 (Jan. 2001): 39-45;

Arthur C. Clarke, *2001, A Space Odyssey* (New York: New American Library, 1968), selections.

Film: *2001, A Space Odyssey*, time and place tba.

Assignment: short essay discussing ideas about technology implicit in *2001*.

Week 15 (12/10) – The Apollo Moon Landing: Triumph and Anticlimax

Questioning Apollo.

Reading: Gerard J. DeGroot, *Dark Side of the Moon: The Magnificent Madness of the American Lunar Quest* (New York: New York University Press, 2006), 223-269.

Assignment: Examine newspaper coverage of the Apollo landing; write a 2-page analysis of what you find.