

## The Atomic Age – History 105A - Spring 2007

**Instructor:** Prof. W. Patrick McCray

**Time:** 9:00 – 9:50 on M-W-F in HSSB 1174

**Office and Office Hours:** HSSB 4224; Monday and Friday 10-11 or by appointment

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**COURSE DESCRIPTION:** This course examines important aspects of the nuclear era from 1945 to the signing of the first arms treaties between the U.S. and the U.S.S.R in the 1960s. We will also pay some attention to nuclear issues during the Carter-Reagan years. A course on the atomic age could be taught from a number of perspectives – social history, history of technology, the impact of nuclear weapons on military history, the effect of atomic weapons on foreign policy, and so forth. The focus here is on two primary areas – the diverse roles that scientists had during the Atomic Age and the powerful influence nuclear weapons had over American military strategy, politics, and popular culture.

**TEXTBOOKS: Please purchase the following paperback books. There are also several articles on electronic reserve in the library for you to read.**

1. Lawrence Badash, *Scientists and the Development of Nuclear Weapons: From Fission to the Limited Test Ban Treaty* (ISBN: 1-57392-538-1)
2. Shane Maddock (editor), *Problems in American Civilization: The Nuclear Age* (ISBN: 0-618-00737-7)
3. Philip Cantelon, Richard Hewlett, and Robert Williams (eds.), *The American Atom* (Referred to below as 'CHW') (ISBN: 0-8122-1354-8)
4. Richard Smoke, *National Security and the Nuclear Dilemma* (ISBN: 0-07-059352-3)
5. John Hersey, *Hiroshima* (ISBN: 0-679-72103-7)

**OTHER RECOMMENDED BOOKS (most on reserve at Davidson Library):**

1. Richard Rhodes, *The Making of the Atomic Bomb*. (New York: Simon and Schuster, 1986). HIGHLY RECOMMENDED!! ONE OF THE BEST BOOKS ON THE MANHATTAN PROJECT ERA.
2. Richard Rhodes, *Dark Sun: The Making of the Hydrogen Bomb*. (New York: Simon and Schuster, 1996). ALSO EXCELLENT!
3. Allan M. Winkler, *Life Under a Cloud: American Anxiety About the Atom*. (1993; University of Illinois Press; ISBN: 0-252-06773-8). GREAT SURVEY OF THE ATOMIC AGE AND A GOOD SUPPLEMENT TO LECTURES
4. Laura McEnaney, *Civil Defense Begins at Home* (Princeton, 2000)
5. David Holloway, *Stalin and the Bomb: The Soviet Union and Atomic Energy, 1939-1956* (Yale Univ. Press, 1996)
6. Spencer R. Weart, *Nuclear Fear*. (Cambridge: Harvard University Press, 1986).
7. Martin Sherwin, *A World Destroyed: Hiroshima and the Origins of the Arms Race*. (New York: Vintage, 1987).
8. Paul Boyer, *By the Bomb's Early Light: American Thought and Culture at the Dawn of the Atomic Age*. (Chapel Hill: University of North Carolina Press, 1994).

9. Elaine Tyler May, *Homeward Bound: American Families in the Cold War Era*. (New York: Basic Books, 1999).
10. Gregg Herken, *Brotherhood of the Bomb: The Tangled Lives and Loyalties of Robert Oppenheimer, Ernest Lawrence, and Edward Teller*. (New York: Henry Holt & Co., 2002).
11. Gregg Herken, *The Winning Weapon: The Atomic Bomb in the Cold War, 1945-50*. (New York: Alfred A. Knopf, 1980).
12. Richard G. Hewlett and Oscar E. Anderson, *The New World (1939-46): Volume One of a History of the United States Atomic Energy Commission*. (University Park, PA: The Pennsylvania State University Press, 1962).
13. Richard G. Hewlett, *Atomic Shield (1947-52): A History of the United States Atomic Energy Commission* (University of California Press, 1991).
14. Richard G. Hewlett, *Atoms for Peace and War, 1953-1961: Eisenhower and the Atomic Energy Commission* (University of California Press, 1989)

### **COURSE REQUIREMENTS AND EXPECTATIONS:**

#### What I expect from you:

1. Academic Honesty – Students caught cheating or plagiarizing will receive an F in the course. This includes lifting materials from web site without proper citation. These matters are typically referred to the Dean of Students and receive a hearing from the Student-Faculty Committee on Student Conduct where I will ask for the maximum penalty – this means either suspension or expulsion. Please review UCSB’s student conduct guidelines if you have any questions about what constitutes cheating or plagiarism: <http://hep.ucsb.edu/people/hnn/conduct/disq.html>
2. Do not come to class late. This disrupts your fellow students, interrupts me, and causes you to miss announcements at the beginning of class.
3. Attend class. Materials on exams will be based on information presented in class as well as the readings. If you miss class, you are sabotaging your chances for a good grade.
4. Keep up with the readings. See the note below on ‘Readings.’
5. Visit during office hours. Try to meet with me least once. This is the best way for me to get to know you and address any questions you may have.

#### What To expect from me:

1. Lectures will be prepared in advance and organized.
2. I will make available on a weekly basis question sets designed to help you with readings and historical IDs.
3. I will see that exams and papers are graded and returned as quickly as possible.
4. I will hold regular office hours.
5. Material in the class is sometimes of a controversial nature. I will do my best to be impartial and identify views that are my own when presenting them.

Readings: Like most history courses, there is a great deal of reading that students should be prepared to do. Plan to read about half a book per week plus some additional articles. Some days have more readings assigned than others. Plan ahead; don’t fall behind on your reading and, when possible, read ahead.

History courses involve a lot of reading – pay close attention to documents you will be reading. Many texts need to be read slowly at least once, sentence by sentence. You are trying to recover what the authors were thinking from a different time. Ask yourself where they are coming from and what they are trying to accomplish. Finally, doing history means offering interpretations of past events – this is what historians do and is why history is so fascinating. Sometimes different historians will tell different stories, come to different conclusions, or place emphasis on different evidence or stories. This is what doing (and reading) history is about. Don't be frightened or put off because there are inconsistencies. Instead, make note of these and ask yourself how these came to be.

History isn't just about learning facts and dates. It's also about understanding how and why things happened. So don't get bogged down in all the facts and dates, at the expense of the big picture. Ask yourself – what is the historical significance of this person, place, or event? Why is this important? How does it relate to other persons, places, and events? Your goal is not to memorize facts but to develop an appreciation for the historical context being presented here. Expect the story to be complicated and not the neat and pretty stories presented on shows like The History Channel.

**GRADING POLICY:** Utilizing lecture materials and readings, discussion and written assignments are intended to increase student capacity to write independently and analytically about historical topics. Class attendance is meant to enhance participation, deepen knowledge of the themes of the course, and identify problems in understanding the information. Attendance is therefore required. Your grade for this course will be based on the following:

Two Essay Assignments – 20% each  
Series of Weekly In-Class Quizzes – 20%  
Final Exam (cumulative) – 40%

In-class quizzes are short historical ID or questions based on the readings. They are typically based on the weekly summaries I will provide to help you study. If you do the readings, look over the summaries, and come to class, you should do fine.

The standard University policies for Academic Dishonesty, Attendance, and Assessment (see the Undergraduate Catalog) apply. All students are expected to complete all assignments and papers on time and take exams at scheduled times. Please do not ask for make-up exams, etc. except in the case of a (documented with writing) medical emergency or other reason deemed serious by the instructor.

The web can be a very useful source of information. It can also be a source for information that is misleading or simply wrong. Therefore, you are welcome to use web-based resources in your written assignments with the following condition – web-based materials and references you use **MUST BE CITED** with the appropriate URL. I will also post a list of “approved” web sites that generally present historically accurate information. This will help you avoid some of the many highly questionable sources floating out there in cyberspace. **DON'T EVEN THINK ABOUT CUTTING AND**

## PASTING MATERIALS FROM WEBSITES INTO YOUR PAPERS WITHOUT PROPER CITATION.

### **WRITTEN ASSIGNMENTS**

You are to submit any written assignments in both hard copy and electronic format via e-mail. Electronic copies will be automatically examined via various web-based programs for matches with on-line content. Assignments found to contain plagiarized passages (i.e. you have included material written by others without giving proper credit or citing the source) will be given an F and you will be referred to the Dean for disciplinary action. I'm not kidding.

Details of the first written assignment will be given out in the second week of class. It deals with reading a selection of articles from the Bulletin of the Atomic Scientists.

I typically show two or three movies that present themes from the Atomic Age. The time, date, and venue for the movies will be announced in class. These will be useful for doing the second writing assignment. You are welcome to rent movies on your own but it is typically more fun and informative to come to the showings I organize.

If your writing skills are poor, seek help on campus NOW. Use the *Chicago Manual of Style* to determine the appropriate way to cite all web pages and documents from web pages.

### Course Outline

Lecture/Date	Topics	Required Readings	Assignments/Notes
<b>1 – April 2</b>	Course introduction		
<b>2 – April 4</b>	New Discoveries	Badash, Ch. 1 & 2 CHW, Documents 1-2	
<b>3 – April 6</b>	Radiation, Scientists and the Public Imagination	Weart, “The Physicist as Mad Scientist” (on electronic reserve)	
<b>4 – April 9</b>	Fission! 1938-39		
<b>5 – April 11</b>	The Manhattan Project - Prologue	Badash, Ch. 3 CHW, Docs. 3-5	
<b>6 – April 13</b>	The Manhattan Project, (1942-44)	CHW, Docs. 6-10	
<b>7 – April 16</b>	Life at Los Alamos		
<b>8 – April 18</b>	Decision to use atomic bombs I	Badash, Ch. 4 CHW, Docs. 11-15, 19, 20	Film showing = Dr. Strangelove (90 min.)
<b>9 – April 20</b>	Decision to use atomic bombs II: Trinity and Potsdam	CHW, Docs. 16, 17, 18, 21; Walker, “Recent Literature...A Search for Middle Ground.”	
<b>10 – April 23</b>	Hiroshima and Nagasaki	Maddock, p. 53-62 and 73-92; Hersey, <i>Hiroshima</i>	
<b>11 – April 25</b>	Reactions to the New Atomic Age	Ogburn’s “Sociology & the Atom”	
<b>12 – April 27</b>	Attempting to Control the Bomb, 1945-50	Badash, Ch. 5; CHW, Doc. 22-24	
<b>13 - April 30</b>	The Russian A- Bomb	CHW, Doc. 27-28	
<b>14 – May 2</b>	Early nuclear strategy, 1945-52	Smoke, Ch. 1-4; Maddock, pp. 93-104; CHW, Doc. 45	
<b>15 – May 4</b>	Race for the Super, Pt. I	Badash, Ch. 6 up to p. 97 CHW, Doc. 30-34	<b>Essay #1 (BAS) Due</b>
<b>16 – May 7</b>	Race for the Super, Pt. II		

<b>17 – May 9</b>	Secrecy, espionage and loyalty in the Atomic Age	Badash, rest of Ch. 6; Read Kaiser article from <i>Representations</i>	Film Showing: On the Beach (100 min.)
<b>18 – May 11</b>	In the Matter of JRO	CHW, Docs. 35-38	
<b>19 – May 14</b>	Civil Defense in U.S., Part I	Maddock, pp. 162-175; CHW, Doc. 39	
<b>20 – May 16</b>	Civil Defense in U.S., Part II		
<b>21 – May 18</b>	The Peaceful Atom	Kay’s article, “Public Opinion and the Atom”; CHW, Docs. 25, 26, 65-71	
<b>22 – May 21</b>	Life Under a Cloud: Atomic Age Culture	Winkler article, “The Atom and American Life” (on electronic reserve)	
<b>23 – May 23</b>	The Nuclear Family	Read E.T. May’s article “Explosive Issues: Sex...” (on electronic reserve)	Film Showing: The Day After (100 min.)
<b>24 – May 25</b>	Nuclear strategy under Eisenhower and JFK	Smoke, Chs. 5-7; Maddock, pp. 105-115; CHW, Docs. 46, 47, 48	
<b>May 28</b>	<b>Memorial Day</b>	<b>NO CLASS</b>	<b>NO CLASS</b>
<b>25 – May 30</b>	Arms control efforts: The Limited Test Ban treaty	Smoke, Ch. 8 CHW, Docs. 40-42, 53; Maddock, pp. 115-138;	
<b>26 – June 1</b>	Nuclear Issues in the 1970s and 1980s, Part I	Smoke, Ch. 11-15 CHW, Docs.50-52, 60, 70	<b>Essay #2 (Atomic Movies) Due</b>
<b>27 – June 4</b>	Nuclear Issues in the 1970s and 1980s, Part II		
<b>28 – June 6</b>	The Legacy of the Atomic Age Today	Maddock, p. 3-26, 176-188	
<b>June 8</b>	<b>NO CLASS</b>	<b>FINAL EXAM PREP</b>	
<b>WEDNESDAY June 13</b>	<b>FINAL EXAM, 8-11AM</b>	<b>FINAL EXAM, 8-11AM</b>	<b>FINAL EXAM, 8-11AM</b>