

HISC 111, UCSD, SPRING 2009
The Atomic Bomb & the Atomic Age

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Office: 2302 HSS, East Wing / Hours: Tues+Thurs 12-1, 3:45-4:15, 6:30-7:30

Tuesdays-Thursdays 5-6:20 PM, Center Hall 002

Grading: Practice Midterm (5%) + Midterm (35%) + Final (60%)

No requirements or prior knowledge expected to take the class

Classwebsite: <http://webctweb.ucsd.edu>

Readings – at the Bookstore

Gregg Herken, *The Brotherhood of the Bomb* (2002)

Readings – Selected Pages as PDFs (on class website):

Berkeley Exhibit, *Oppenheimer: A Life* (2004).

Albert Einstein, *On Politics* (2007).

Fred Kaplan, *The Wizards of Armageddon* (1983; 1984).

James Kunetka, *City of Fire: Los Alamos ..., 1943-1945* (1978).

H. Peter Metzger, *The Atomic Establishment* (1972).

Norman Moss, *Men Who Play God* (1968).

Michael Sherry, *The Rise of American Air Power ...* (1987).

Michael Uhl and Tod Ensign, *GI Guinea Pigs* (1980).

Herbert York, *Race to Oblivion: A Participant's View of the Arms Race* (1970).

Lectures, Readings, Exams

March

31 NUCLEAR WEAPONS, NUCLEAR FEAR: Introduction

Surf the Class Website. Watch (IAPA): *A Is for Atom* [<http://www.archive.org/details/isforAto1953>]; download “Atomic Links” as a rar file in the Atomic Database on the Class Website.

April

02 RADIOACTIVE: Radiation, the Nucleus, Nuclear Energy

Surf the Class Website. Watch (IAPA): *A Is for Atom* [<http://www.archive.org/details/isforAto1953>].

The Atom Bomb & Strategic Bombing, 1939-1945

07 FISSION: Uranium and Transuranic Elements (1939-1941)

Read: Kunetka, *City*, pp. 2-40. Watch (IAPA): *A Is for Atom*.

09 NEUTRONS: Plutonium, Reactors and Bombs (1941-42)

Read: Herken, *Brotherhood*, pp. 1-62.

14 MED: General Groves and the Manhattan Project (1942-1943)

Read: Kunetka, *City*, pp. 41-89; Herken, *Brotherhood*, pp. 63-79.

16 OPPIE: Oppenheimer and Los Alamos (1943) + Practice Midterm in Class

Read: Kunetka, *City*, pp. 90-106; Herken, *Brotherhood*, pp. 81-121.

21 THE GADGET: Thin Man, Fat Man, Little Boy (1944-1945)

Read: Kunetka, *City*, pp. 107-57; watch *Stay Strong & Safe* [<http://www.archive.org/details/StaySafe1960>]

23 LEMAY: Strategic Bombing in Europe & Asia (1936-1945)

Read: Sherry, *Rise*, 256-300.

28 TRINITY: Firebombing, Politics, Testing & Using the Bomb (January-August 1945)

Read: Kunetka, *City*, pp. 158-89; Herken, *Brotherhood*, pp. 122-37.

30 DISCUSSION OF THE ATOM BOMB + IN-CLASS MIDTERM

Read: Herken, *Brotherhood*, pp. 138-56.

TAKE-HOME MIDTERM DUE IN CLASS ON 5 MAY

May

The Hydrogen Bomb & Radioactive America, 1945-1954

05 CROSSROADS: A-Bombs and Bikinis, (1946-1948)

Read: Uhl & Ensign, *GI*, pp. 30-53.

07 TELLER: The Nuclear Navy, SAC, the RAND Corporation, and the Super Bomb (1948 to 1950)

Read: Kaplan, *Wizards*, pp. 51-84; Herken, *Brotherhood*, pp. 159-93; Einstein, *On Politics*.

12 FUSION: Spies and the American Thermonuclear Device (1950-1952)

Read: Herken, *Brotherhood*, pp. 194-251; Moss, *Men*, pp. 64-94.

14 GODZILLA: "Atoms for Peace," Hydrogen Bombs, the Trial of Oppenheimer (1953-1954)

Read: Herken, *Brotherhood*, pp. 251-94. Optional: Metzger, *Atomic*, pp. 15-39.

19 NUKES: The Nautilus, Nuclear Power, Nuclear Weapons (1954-1957)

Read: Uhl & Ensign, *GI*, pp. 54-88. Watch: *A Is for Atom*.

Armageddon, or "How I Learned to Stop Worrying and Love the Bomb," 1954-1962

21 FALLOUT: Atomic Soldiers, and Physical and Biological Effects of Nuclear Explosions

Read: Moss, *Men*, pp. 94-114.

26 CD: Nuclear Policy, Nuclear Fear, Nuclear Culture in the 1950s.

Read: Herken, *Brotherhood*, pp. 295-328.

28. MISSILES: ICBMs and Megatons (1951-1961)

Read: York, *Race*, pp. 27-48, 75-124; Kaplan, *Wizards*, pp. 174-84; Moss, *Men*, pp. 115-32.

June

02 CUBA: SIOP-62 & the Cuban Missile Crisis (1961-1962)

Read: Kaplan, *Wizards*, pp. 185-257

04 DISCUSSION OF NUCLEAR WEAPONS AND NUCLEAR FEAR

Read: Herken, *Brotherhood*, pp. 329-34.

11 Final: Take-Home Essay Due in Class at 7 PM + In-Class Final

Video Sources

IAPA (Internet Archive Prelinger Archives) [www.archive.org/details/prelinger]:

1940, <i>Taking the 'X' Out of X-Rays</i>	1951, <i>Survival Under Atomic Attack</i>
1945, <i>Trinity Blast</i>	1952, <i>What You Should Know About BW</i>
1945, <i>Trinity Blast</i> (close)	1954, <i>A Is for Atom</i>
1946-55, <i>Atombomb (Joe Bonica's)</i>	1954, <i>House in the Middle</i>
1946, <i>Operation Crossroads I: Able</i>	1955, <i>About Fallout</i>
1946, <i>Operation Crossroads II: Baker</i>	1955, <i>Operation Cue</i>
1946, <i>Tale of Two Cities (Hiroshima and Nagasaki)</i>	1956, <i>On Guard! The Story of SAGE</i>
1950, <i>Medical Aspects of Nuclear Radiation</i>	1957, <i>The Relaxed Wife</i>
1951, <i>Duck and Cover</i>	1957, <i>In the Suburbs</i>
1951, <i>Atomic Alert</i>	1963, <i>About Fallout</i>

Suggested Books for Future Reference:

Gar Alperovitz, *The Decision to Use the Atomic Bomb* (1995)

Philip Bobbitt et al., *US Nuclear Strategy: A Reader* (1989)

Thomas Coffey, *Iron Eagle: The Turbulent Life of General Curtis LeMay* (1986)

Richard Rhodes, *The Making of the Atomic Bomb* (1986; 1988)

Richard Rhodes, *Dark Sun: The Making of the Hydrogen Bomb* (1995; 1996)

Stuart Weart, *Nuclear Fear: A History of Images* (1988)

Eileen Welsome, *The Plutonium Files: America's Secret Experiments in the Cold War* (1999)