

HISC 111, UCSD, FALL 2010
The Atomic Bomb & the Atomic Age

William Clark / wiclark@ucsd.edu / Lecture: Tuesdays-Thursdays 5-6:20 PM, Center Hall 216
Office: 2302 HSS, East Wing / Hours: Tues+Thurs 12-1 & 6:30-7:30 P.M.

Grading: Practice Midterm (5%) + Midterm (35%) + Final (60%) / Midterm & Final consist of two parts:
(1) take-home essays, due in class the day of the exams, and (2) an in-class short answers.

No requirements or prior knowledge expected to take this class.

Class Website: <http://webctweb.ucsd.edu>

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

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

“The Creation of SIOP-62.”

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).

Videos:

A Is for Atom (1952/53) [on class website and at: <http://www.archive.org/details/isforAto1953>]

Let's Face It: Operation Alert & Operation Doorstep (1954) [on class website].

The Manhattan Project (2002) [on class website].

Dr. Teller's Very Large Bomb (2005) [on class website].

Stay Safe, Stay Strong (1960) [on class website and at: <http://www.archive.org/details/StaySafe1960>].

Lectures, Readings, Exams

SEPTEMBER

23 NUCLEAR WEAPONS, NUCLEAR FEAR: Introduction

Download “Atomic Links” in the Database on the Website & Peruse It, Especially Folders 3-6.

28 RADIOACTIVE: Radiation, the Nucleus, Nuclear Energy

Watch: *A Is for Atom*, 0:00-10:34. Peruse the Atomic Links from the Database, Especially Folder 5.

The Atomic Bomb & Strategic Bombing, 1933-1945

30 FISSION: Uranium and Transuranic Elements (1933-1939)

Watch: *A Is for Atom*, 0:00-10:34. Surf wikipedia on: Neutrons, Uranium, Plutonium, Fission, etc.

OCTOBER

05 NEUTRONS: Plutonium, Reactors, and Bombs (1939-42)

Read: Kunetka, *City*, pp. 2-40.

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

Read: Kunetka, *City*, pp. 41-89.

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

Read: Kunetka, *City*, pp. 90-106.

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

Read: Kunetka, *City*, pp. 107-57. Watch: *Stay Safe, Stay Strong* (1960), 0-11:50 minutes.

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

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

21 TRINITY: Firebombing, Politics, Testing & Using the Bomb (March-August 1945)

Read: Kunetka, *City*, pp. 158-89. Watch: *The Manhattan Project* 1-3 (2002). Peruse Folder 4 in Atomic Links

26 MIDTERM: ESSAY DUE IN CLASS AT 5 PM / REVIEW & QUESTIONS, 5-5:30 / SHORT ANSWERS, 5:30-6:30

The Hydrogen Bomb & the Atom Spies, 1945-1954

28 CROSSROADS: A-Bombs, Bikinis, and the Nuclear Navy (1946-1950)

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

NOVEMBER

02 TELLER: SAC, the RAND Corporation, and the Super Bomb (1948 to 1950)

Read: Kaplan, *Wizards*, pp. 51-84; Einstein, *On Politics*.

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

Read: Moss, *Men*, pp. 64-94; Metzger, *Atomic*, pp. 15-39.

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

Watch: *Dr. Teller's Very Large Bomb* 1-3 (2005).

Ballistic Missiles & Radioactive America, 1954-1962

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

Watch: *A Is for Atom + Let's Face It* (1954) [on class site]. Peruse Folders 6, 10, & 14 in Atomic Links.

18 FALLOUT: Atomic Soldiers, Nuclear Policy, Nuclear Fear, Nuclear Culture in the 1950s

Read: Moss, *Men*, pp. 94-114; Uhl & Ensign, *GI*, pp. 54-88. Peruse Folders 8-9, 15-17 in Atomic Links

23 MISSILES: ICBMs and Megatons (1951-1961)

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

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

Read: Kaplan, *Wizards*, pp. 185-257; "Creation of SIOP-62."

DECEMBER

02 DISCUSSION: Nuclear Weapons & Nuclear Fear.

Peruse the Atomic Links, Especially Folders 2-6.

10 Final: Take-Home Essay Due in Class at 7 PM + In-Class Final To Be Done 7-10 PM

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 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)