

HISC 111, UCSD, FALL 2011
The Atomic Bomb & the Atomic Age

William Clark / wiclark@ucsd.edu / Lecture: Tuesdays-Thursdays 5-6:20 PM, Center Hall 113
Office: 2302 HSS, East Wing / Hours: Tues+Thurs 12-1 & 6:30-7:30 P.M.

Philip Clements (pclement@ucsd.edu): Sections & Office Hrs. TBA
Audrey Lackner (alackner@ucsd.edu): Sections & Office Hrs. TBA

There are no requirements or expected prior knowledge to take this class. You are expected to come to lectures.

Grading: Class Participation (15+%) + Midterm (30%) + Final (55%).

The class participation 15+% is given automatically to each student, but “bad behavior” (see below) will lead to a loss of some of this per cent of the grade. The midterm and final will consist of in-class short answers and essays. Exams will be based on materials presented in lectures and discussed in sections. You will NOT be examined on readings and videos per se, although they will be of great use in acquiring a depth of knowledge to write the essays. Excepting pace-makers, heating aids, and book-lights. all electronic devices are forbidden in class – use of such devices will severely impact your class participation grade! This means no texting etc. in class. The discussion sections are optional. It is absolutely possible to get an A in the class without attending any sections. But the TAs will play a very big role in formulating the midterm and final essay questions, based on discussions in the sections to be set up: we shall begin setting up the days and times of the sections on Thursday, 22 September, based on input from all the students.

Class Website: <http://ted.ucsd.edu> – all class materials will be under “Content” in the top-left menu.

Readings (selected pages as pdfs on the class website):

“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).

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 (as mp4s of flvs on the class website or others – the videolan player can play these):

<http://www.videolan.org/vlc/download-windows.html>

<http://www.videolan.org/vlc/download-macosx.html>

100 Great Discoveries, 3, Chemistry: Radioactivity (2004) [on class website].

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

Battle Plan, 16: Strategic Bombing (2006) [on class website].

The Day After Trinity (1980) [on class website].

Our Friend the Atom (1957) [on class website].

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

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

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

Race for the Strategic Ballistic Missile (2006) [on class website].

Race for the Superbomb (1999) [on class website].

Rain of Ruin (2004) [on class website].

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

Lectures, Readings, Exams

Prologue

SEPTEMBER

22 01 NUCLEAR WEAPONS, NUCLEAR FEAR: Introduction

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

27 02 RADIOACTIVE: Radiation, the Nucleus, Nuclear Energy

Watch: *A Is for Atom*, 0:00-10:34 & for more background: *Our Friend the Atom*, 19:54-29:58 & *100 Great Discoveries*, 3, *Chemistry: Radioactivity*.

The Atomic Bomb & Strategic Bombing, 1933-1945

29 03 FISSION: Uranium and Transuranic Elements (1933-1939)

Watch: *A Is for Atom*, 0:00-10:34 & for more background: *Our Friend the Atom*, 33:43-49:45.

OCTOBER

04 04 NEUTRONS: Plutonium, Reactors, and Bombs (1939-42)

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

06 05 MED: General Groves and the Manhattan Project (1942-1943)

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

11 06 OPPIE: Oppenheimer and Los Alamos (1943)

Read: Kunetka, *City*, pp. 90-106. Watch: *The Day After Trinity* 1.

13 07 THE GADGET: Thin Man, Fat Man, Little Boy (1944-1945)

Read: Kunetka, *City*, pp. 107-57. Watch: *Manhattan Project* 1.

18 08 LEMAY: Strategic Bombing in Europe & Asia (1936-1945)

Watch: *Battle Plan, 16: Strategic Bombing*. Read: Sherry, *Rise*, 256-300.

20 09 TRINITY: Testing & Using the Bomb (May-August 1945)

Read: Kunetka, *City*, pp. 158-89. Watch: *Manhattan Project* 2 + *Dr. Teller's Very Large... 1*.

25 10 MIDTERM

In preparation, watch: *Rain of Ruin* 1-3 + *Day After Trinity* 2. Review materials in the Session 10 folder.

The Hydrogen Bomb & the Atom Spies, 1945-1954

27 11 CROSSROADS: A-Bombs, Bikinis, and the Nuclear Navy (1946-1950)

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

NOVEMBER

01 12 TELLER: SAC, the RAND Corporation, and the Super Bomb (1948 to 1951)

Read: Kaplan, *Wizards*, pp. 51-84; Einstein, *On Politics*; Moss, *Men*, pp. 64-94.

03 13 FUSION: Spies and the American Thermonuclear Device (1950-1952)

Watch: *Race for the Superbomb* 1 & 2: 0:00-12:06 + *Dr. Teller's Very Large Bomb* 2.

08 14 GODZILLA: “Atoms for Peace,” Hydrogen Bombs, the Trial of Oppenheimer (1953-1954)

Watch: *Race for the Superbomb* 2: 16:11-26:58 + *Day After Trinity* 3.

Ballistic Missiles & Radioactive America, 1954-1962

10 15 FALLOUT: Atomic Soldiers, Nuclear Policy, Nuclear Fear, Nuclear Culture in the 1950s

Watch: *Race for the Superbomb* 2: 12:06-16:11, 26:58-56:19 + *Let's Face It*. Read: Moss, *Men*, pp. 94-132; Uhl & Ensign, *GI*, pp. 54-88.

15 16 NUKES: The Nautilus, Nuclear Power, Nuclear Weapons (1954-1957)

Watch: *A Is for Atom* + *The Atom*, 15:45-21:51. Read Kaplan, *Wizards*, pp. 174-84.

17 17 MISSILES: ICBMs and H-Bombs (1951-1961)

Watch: *Race for the Strategic Ballistic Missile* 1-2. Read: York, *Race*, pp. 27-48, 75-124.

22 18 CUBA: SIOP-62 & the Cuban Missile Crisis (1961-1962)

Watch: *Race for the Strategic Ballistic Missile* 3 + *Dr. Teller's Very Large Bomb* 3. Read: Kaplan, *Wizards*, pp. 185-257; “Creation of SIOP-62.”

Epilogue

29 19 MAD: Nuclear Weapons, Nuclear Policy, Nuclear Fear, 1962-

DECEMBER

01 20 NUCLEAR WEAPONS, NUCLEAR FEAR: Conclusion.

Look at materials in Session 20 folder.

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