

Global Nuclear Proliferation

Fall 2014 | G390 DENT | Mondays and Wednesdays, 10-11:30

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Hours: Wednesdays, 4:15-5:45 and by appt.

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→ see section syllabus for GSI office & hours

Overview

This course presents a global perspective on the history and politics of nuclear weapons. It examines the science and technology of these weapons; the politics of their growth, spread, and control; environmental and health consequences of their development; and the cultural responses and social movements they have engendered.

We begin with the bombing of Hiroshima and Nagasaki. Next we examine the unfolding of the Cold War, focusing particularly on the superpower arms race and exploring both US and Soviet perspectives on these developments. Why and how have different states pursued nuclear weapons development? We explore this question via a pair of studies on “proliferation circuits.” Along the way, we also examine the health and environmental consequences of nuclear weapons, as well as the history of anti-nuclear protest movements.

The course introduces students to the complex, multi-layered history of nuclear history and policy issues. You will be challenged to move past your political beliefs and ideologies (whatever these may be) in order to understand decisions and developments in historical context, and in relation to different cultural and national perspectives. You will be exposed to a variety of conceptual tools and theories to help you make sense of the material, drawing not only on the discipline of history but also on political science and anthropology.

Your work

Weekly reading: You will be assigned an *average* of 70-100 pages of reading a week (sometimes more, sometimes less; in general the expectation is that you spend 4-6 hours on reading per week). You are expected to do all the assigned reading before class. Each week, reading questions will be posted on our CTools site. These are intended to guide your reading and thinking, and you should be prepared to discuss them all during class (some may recur in modified version on midterms). **Note: in any given week, there may be more reading listed for one day than the other. You should check in advance and plan your time accordingly.**

Weekly writing: You are required to write a reading response most weeks, with exceptions noted on the syllabus. Typically this will be a written response to one of the posted reading questions, though occasionally we will require something else (equivalent in time and effort). You should allow 1-2 hours for this purpose every week. These responses **must** be returned in **hard copy** to your GSI during your

scheduled section meeting every week. They should be 300-400 words long, and consist of full sentences. These will be graded on a check/check-plus/check-minus basis. Please see your section syllabus for further details.

Two papers: You will write two papers, 5-7 pages in length. These will be based on lectures, the common assigned reading, plus a modest amount of additional research. We will hand out more detailed guidelines in due course.

Two mid-term exams: there will be two mid-term exams, but no final.

Two in-class debates: Twice during the semester, we will stage debates within the lecture part of the course. Everyone will have an assigned role. We will hand out more detailed guidelines in due course.

Class participation: Participating in class discussion is an essential part of learning. You are expected to contribute regular, thoughtful comments that reflect completion of the assigned readings and engagement with the material. Active participation will be an important component of your overall grade. Your comments may also draw upon your reading of the week's news or other material, as long as you can make clear the relationship of such material to the topic at hand. Feel free to raise questions about anything in the reading that you didn't understand: such questions are also a valuable way of advancing the discussion. **Note that attendance, while essential, is not equivalent to participation.**

Grades will be calculated as follows:

Papers: 20% each (total = 40%)

Mid-terms: 15% each (total = 30%)

Class participation (including debates) and weekly responses: 30%

Course materials: Most readings are on the Ctools site or at websites designated on the syllabus. In addition, two required books have been ordered through Wolverine Access and should be available at local bookstores and on reserve at the library. **Please obtain these right away, so you have them when you need them.**

Kate Brown, *Plutopia: Nuclear Families, Atomic Cities, and the Great Soviet and American Plutonium Disasters* (Oxford University Press, 2013)

Scott D. Sagan and Kenneth N. Waltz, *The Spread of Nuclear Weapons: An Enduring Debate* (Norton, 3rd edition 2003).

Accommodations: Students with learning differences or challenges are encouraged to take advantage of university resources. Within the first two weeks of class, please inform both the professor and your GSI if you need any accommodations. Documentation is required for all requests.

Course policies: Attendance is mandatory, etc, etc. For full details, please read the Course Contract carefully. **It must be initialed, signed, and returned no later than September 10.**

SCHEDULE

PART I THE ATOM BOMB, THE ARMS RACE, AND THE COLD WAR

Week 1

September 3 Introduction

Week 2

September 8 The Manhattan Project and the decision to drop the bomb

Barton J. Bernstein, "The Atomic Bombings Reconsidered," *Foreign Affairs* 74 (1995) 1: 135-151.

Gar Alperovitz, "Hiroshima: Historians Reassess," *Foreign Policy*.(1995) Summer: 15–34.

Ward Wilson, "The Bomb Didn't Beat Japan...Stalin Did," *Foreign Policy* (May 29, 2013): 1-10.

September 10 Hirsoshima and Nagasaki

John W. Dower, "The Bombed: Hiroshimas and Nagasakis in Japanese Memory," in Michael J. Hogan, *Hiroshima in History and Memory* (Cambridge University Press), pp. 116-142.

Martin Sherwin, "Hiroshima as Politics and History," *Journal of American History*, Vol. 82, No. 3 (Dec. 1995): 1085-1093.

Week 3

September 15 Military-Industrial complexes under capitalism and communism

Kate Brown, *Plutopia*, Introduction, chs. 1-4 and 10-14

September 17 Nuclear Exceptionalism

Gabrielle Hecht, "The Power of Nuclear Things," *Technology and Culture* 51 (January 2010): 1-30.

Hugh Gusterson, "Nuclear Weapons and the Other in the Western Imagination," *Cultural Anthropology* 14 (1): 111-143.

Primary source:

Treaty on the Non-Proliferation of Nuclear Weapons, entered into force on 5 March 1970, reprinted as IAEA INFCIRC/140, 20 April 1970.

Week 4

September 22 A Nuclear World I

Scott D. Sagan and Kenneth N. Waltz, *The Spread of Nuclear Weapons: An Enduring Debate* (Norton, 3rd edition 2003): 3-87.

Primary source:

Department of Defense, "Narrative Summaries of Accidents Involving US Nuclear Weapons, 1950-1980." Read first four pages, then browse through the rest, choosing 3-4 descriptions to read in full.

September 24 A Nuclear World II

Scott D. Sagan and Kenneth N. Waltz, *The Spread of Nuclear Weapons: An Enduring Debate* (Norton, 3rd edition 2003): 82-134.

Week 5

September 29 Atomic Cultures (1)

Kate Brown, *Plutopia*, chapters 5-9.

Browse through the the Oak Ridge Associated Universities Health Physics Historical Instrumentation Museum Collection,

<http://www.ornl.gov/ptp/collection/civildefense/civildefense.htm>.

- In particular, click on: LP Record on "If the Bomb Falls" and Civil defense comic "Operation Survival" (both at the bottom, under "Miscellaneous Civil Defense Stuff")

October 1 Atomic Cultures (2) + Review

Kate Brown, *Plutopia*, chapters 16-21.

Week 6

October 6 Midterm #1

PART II **PROLIFERATION CIRCUITS: ISRAEL & SOUTH AFRICA**

Week 6 (cont'd)

October 8 **Israel**

Required: Avner Cohen, *The Worst-Kept Secret: Israel's Bargain with the Bomb* (Columbia, 2012), chapters 1 (pp. 1-33). **NOTE: this is available through Mirlyn's ebrary resource.**

Suggested (overlaps with material covered in lecture): Avner Cohen, *The Worst-Kept Secret*, chapter 3 (pp. 56-87).

Week 7

October 13 **FALL BREAK – no class meeting**

October 15 **South Africa**

Peter Liberman, "The Rise and Fall of the South African Bomb," *International Security*, Vol. 26, no. 2 (Fall 2001): 45-86.

Avner Cohen, *The Worst-Kept Secret*, chapter 2 (pp. 34-55)

Week 8

October 20 **Israel and South Africa: partnerships and regional perspectives**

Avner Cohen, *The Worst-Kept Secret*, chapters 4 and 5 (pp 88-146) AND EITHER chapter 6 (pp 147-170) OR chapter 7 (171-202).

October 22 **Primary source in-class exercise and debate preparation**

African National Congress, *The Nuclear Conspiracy: FRG collaborates to strengthen Apartheid* (Bonn: PDW-Verlag, 1975).

***Israel and the Bomb*, book site courtesy of National Security Archive:**

<http://www.gwu.edu/~nsarchiv/israel/documents/battle/index.html>

National Security Archive, EBB 181 - U.S. Intelligence and the South African Bomb:

<http://www.gwu.edu.proxy.lib.umich.edu/~nsarchiv/NSAEBB/NSAEBB181/index.htm>

Week 9

October 27 **Class debate**

Details announced in class. You will need to prepare for this debate, but the work of that preparation will also go toward your paper.

October 29 **Paper due + Working in the Nuclear Complex**

PART III **OCCUPATIONS, ENVIRONMENTS, AND CIVIL SOCIETY**

Week 10

November 3 **Radiation Exposure**

Kate Brown, *Plutopia*, Part 3, pp. 165-212.

November 5 **Uranium, radon, and the least visible nuclear work**

Gabrielle Hecht, "Africa and the Nuclear World: Labor, Occupational Health, and the Transnational Production of Uranium," *Comparative Studies in Society and History*, 51/4 (October 2009): 896-926

Week 11

November 10 **Atomic bomb tests**

US Department of Energy, Advisory Committee on Human Radiation Experiments, Final Report.

Read:

- Ch. 10 (entire)
- Ch. 12 (Introduction and "The Marshallese")

Watch online at <http://search.alexanderstreet.com.proxy.lib.umich.edu/view/work/772417> : *The Big Picture, Episode 308: The Atom Soldier* (1955).

November 12 **Waste and Remains**

Kate Brown, *Plutopia*, Part 3, pp. 213-270

Week 12

November 17 Nuclear Politics in the East Bloc

Kate Brown, *Plutopia*, Part 4, pp. 271-338

November 19 Activism in the Nuclear Age + Review

Mike Kirby, "Diary," *London Review of Books*, Vol 36, No. 15 (July 2014): 38-39.

Week 13

November 24 Midterm #2

PART IV PROLIFERATION CIRCUITS: ASIAN NETWORKS

Week 13 (cont'd)

November 26 South Asia

Shampa Biswas, "'Nuclear Apartheid as Political Position: Race as a Postcolonial Resource?'" *Alternatives: Global, Local, Political*, Vol. 26, No. 4 (Oct.-Dec. 2001): 485-522 (25 pp, rest is notes).

Watch online at: <http://www.youtube.com/watch?v=EeBRVFe5oQ>

"Pakistan and India Under the Nuclear Shadow"

- the first 3 minutes are on Hiroshima etc – don't be discouraged, just keep watching

Watch online at: <http://www.youtube.com/watch?v=XAb9UjzdixQ>

"Buddha weeps in Jadugoda"

- note that YouTube breaks this up into 6 parts. Be sure to watch all 6 parts.

Week 14

December 1 India

Itty Abraham, "Contra-Proliferation: Interpreting the Meanings of India's Nuclear Tests in 1974 and 1998," in Scott Sagan, ed., *Inside Nuclear South Asia* (Stanford, 2009): 106-128.

December 3**Pakistan & A. Q. Khan**

William Langewiesche, "The Wrath of Khan: How A. Q. Khan made Pakistan a nuclear power—and showed that the spread of atomic weapons can't be stopped," *The Atlantic Monthly* (November 2005).

William Langewiesche, "The Point of No Return," *The Atlantic Monthly* (January/February 2006).

Scott D. Sagan and Kenneth N. Waltz, *The Spread of Nuclear Weapons: An Enduring Debate* (Norton, 3rd edition 2003): 135-174.

Week 15**December 8****Iran**

Erich Follath and Holger Stark, "The Birth of a Bomb: A History of Iran's Nuclear Ambitions," *Der Spiegel* (Online International edition), 6/17/2010. Article on Ctools; for online version and picture gallery, see <http://www.spiegel.de/international/world/0,1518,701109,00.html>.

Avner Cohen, *The Worst-Kept Secret*, chapter 9, pp. 214-240.

Peter Jones, "Learning to Live with a Nuclear Iran," *The Nonproliferation Review*, 19:2, 197-217.

Scott D. Sagan and Kenneth N. Waltz, *The Spread of Nuclear Weapons: An Enduring Debate* (Norton, 3rd edition 2003): 175-214.

US public policy debate on Iranian centrifuges (6 pages each not including notes):

A. Glaser, Z. Mian, H. Mousavian, & F. von Hippel, "Agreeing on Limits for Iran's Centrifuge Program: A Two-Stage Strategy," *Arms Control Today* (July/August 2014).

ISIS, "Comments on the Princeton Group's Proposal on Iran," June 12, 2014.

December 10**Final class debate**

Details announced in class. You will need to prepare for this debate, but the work of that preparation will also go toward your paper.

Final paper due December 12, 4 pm.