Humans Going Nuclear: Atomic Bombs, Cold War, and the Fallout

This course fulfills both the GSS & VSR Carolina Core Requirements

Final Exam Date: April 29, Monday (Last Day of Class)

Catalog Description:

Ethnographic study of the Cold War, nuclear culture, and its aftermath.

Course Description and Objectives:

This course will introduce students to the socio-cultural legacies of the Cold War (1945-present). In particular, we are going to look at the nuclear arms race and how it lives on in the institutions, political and economic practices, cultural narratives, and everyday lives. The overall objective here is to help students develop a deeper understanding of how nuclear testing, as well as nuclear accidents in Chernobyl, Fukushima, and Hopkins South Carolina remade communities, public cultures, and the consciousness of individuals most affected by the nuclear arms race. What are the lasting political, social, cultural, and scientific legacies of the development and testing of the atomic bomb? How have people dealt with the consequences of nuclear fallout and damaged environments? How do the different stages of the nuclear fuel cycle, from uranium mining to nuclear waste storage, impact the environment and its people today? Drawing on ethnographies of "nuclearity," popular media, and film, this course reflects on the "aftermaths" of humans going nuclear, tracing their remainders in the present. We will survey case studies from Japan, Russia, Ukraine, Kazakhstan, the United States, and the Marshall Islands among others. This course is relevant to those interested in issues of power and resistance; health and illness; risk perceptions; damaged environments; human rights.

Learning Outcomes: At the end of this course, students should:

- 1) be able to explain the lasting legacies of the nuclear age in various cultural and geographic contexts.
- 2) be able to explain key theories and concepts in cultural anthropology addressing "nuclearity," such as risk, nuclear orientalism, plutopia, nuclear fuel cycle, and nuclear colonialism.
- 3) be able to identify critiques emerging from cultural anthropology and describe their usefulness in global and local health issues related to radiation exposure.
- 4) be able to critically analyze how social, political, and historical forces shape health outcomes and environment pollution.
- 5) be able to apply anthropological thinking to "real world" problems past and present.

Carolina Core Outcomes:

GSS - Students will be able to use the principles of the social sciences to explore diverse cultural identities and to analyze political and environmental issues.

VSR - Students will be able to examine different kinds of social and personal values, analyzing the ways in which these are manifested in communities as well as individual lives.

Course Materials:

1. Books:

- Alexievich, Svetlana. 2006. Voices from Chernobyl: The Oral History of a Nuclear Disaster. New York: Picador.
- Brown, Kate. 2013. *Plutopia: Nuclear Families, Atomic Cities, and the Great Soviet and American Plutonium Disasters*. Oxford: Oxford University Press.
- Freeman, Lindsey. 2015. *Longing for the Bomb: Oak Ridge and Atomic Nostalgia*. Chapel Hill: The University of North Carolina Press.
- Johnston, Barbara and Holly Barker. 2008. *Consequential Damages of Nuclear War: The Rongelap Report*. New York: Routledge.

2. Articles:

There will be many articles placed for you to download and print from **Blackboard**. These articles are an essential part of the course and for you to do well on exams. All of the readings closely follow the lectures, as well as in-class discussions. You may want to print the articles, as it will be easier to highlight essential sections for discussion and study purposes.

How to download articles from Blackboard:

Go to the login screen at https://blackboard.sc.edu. Use your Username and Password to access reading materials in the login screen. Articles can be accessed from your course section.

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Expectations of Students:

I hope you will want to attend this class, and that you will take notes on the lectures and participate in class discussions.

Students are expected to attend lectures. For you to do well in this course, attendance is key. If you miss a class, you also will miss important lecture material, possible scheduling changes, discussions, films, and notes. If for some reason you are unable to attend a class, try to get notes from other students, as many exam questions will come from lecture and discussion. Students are also expected to read the assigned readings before class and be prepared to discuss the topic of the day.

Attendance: When you miss class, you miss important information. If you are absent, you are responsible for learning material covered in class. If you are absent when an assignment is due, you must have submitted the assignment prior to the due date to receive credit. If you miss more than 10% of the classes, whether excused or unexcused, your final grade will be dropped one letter grade for each day absent in excess of the university policy. Attendance will be taken at the start of each class.

Lateness to Lecture: Any disruption to class lecture makes it difficult for other students to learn, as well as makes it difficult for me to keep on top of the material. To make things easier for everyone, I expect that you arrive on time. Lateness to lecture will be marked on the attendance sheet and will be reflected in your final grade.

Computer and Phone Use: This is an electronics-free classroom. This means that laptops, cellphones, and tablets are not permitted in class. Students who need laptops for accommodation purposes for note taking must let me know during the first week of the semester. Using computers or phones for purposes

unrelated to class is **not allowed** and students who spend time on their phone or computer for reasons other than note-taking (Facebook, texting, etc) will be marked as absent and asked to leave class.

Extra Credit: There are no extra credit opportunities in this class.

Email Availability: I will check and respond to emails regularly on weekdays. I will not respond to emails during evenings and/or on weekends.

Make-up Work: With the exception of the final exam, exams can be made up with a valid excuse only. You can access the University's definitions of excused absences on this website: http://bulletin.sc.edu/content.php?catoid=52&navoid=1280#Attendance_Policy.

Incompletes: Incompletes will be given if the student meets university requirements listed at: http://bulletin.sc.edu/content.php?catoid=52&navoid=1280#Grading_Policies.

Academic Integrity: All students attending USC are responsible for knowing and adhering to the Honor Code academic integrity policy of this institution. Violations of this policy include: **cheating, plagiarism, aid of academic dishonesty, and falsifying work and/or assisting other students**. All incidents of academic misconduct **will not be tolerated**. Students who are found to be in violation of the academic integrity policy will be subject to both academic sanctions from the faculty member and will be reported to the Office of Student Conduct and Academic Integrity. If you have any questions what constitutes academic integrity, please consult:

https://www.sc.edu/about/offices_and_divisions/student_conduct_and_academic_integrity/index.php.

Respectful Behavior: This class is intended to be a safe and secure learning environment for all students. As a result, I expect you to abide by the **Carolinian Creed**: to respect each other's views and engage in discussion in a professional manner. Students shall not discriminate on basis of "race, color, religion, national origin, sex, sexual orientation, gender, age, disability, veteran status or genetics" as outlined in the University's Office of Equal Opportunity Programs, available at:

https://www.sc.edu/about/offices.and_divisions/equal_opportunities_programs/index.php_If you have

https://www.sc.edu/about/offices_and_divisions/equal_opportunities_programs/index.php. If you have any problems, concerns, or issues that you would like to address, please speak with me. For more information about the **Carolinian Creed**, please visit http://www.sa.sc.edu/creed.

Physical or Learning Disabilities: Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, students are encouraged to register with Student Disability Resource Center at 1523 Greene Street, LeConte Room 112A, 803-7776142, and present the instructor with a letter indicating what types of accommodations will be required. Please consult the Student Disability Resource Center for more information: http://www.sa.sc.edu/sds/.

Writing Help: This course has several writing assignments. The University Writing Center is an important resource you should use! It's open to help any USC student needing assistance with a writing project at any stage of development. The main Writing Center is in Byrnes 703. Writing Center (http://artsandsciences.sc.edu/write/university-writing-center)

Counseling Services: The University offers counseling and crisis services as well as outreach services, self-help, and frequently asked questions. <u>Counseling Services</u>

(https://sc.edu/about/offices_and_divisions/student_health_services/medical-services/counseling-andpsychiatry/index.php).

Note 1: This course will introduce you to ideas, concepts, and cultures that you might not be familiar with. As a result, some of your most cherished beliefs may come into conflict with what you learn. Knowing that, this course is not designed to change your mind or to change who you are, but rather to expose you to ideas so you can better develop your own position on a variety of issues. I encourage debate that is intelligent and open-minded.

Note 2: I reserve the right to make changes to the syllabus and the course throughout the semester. If and when changes occur, I will notify students in advance.

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Grading and Evaluation Will Be Based On:

- 1. **Two Take Home Exams (25% each):** The take home exam will consist of an essay that is 4-5 pages in length, double spaced. I will provide a choice of questions well ahead of the exam due date. The questions will cover material from the course, including readings, films, and discussions. Each essay should make use of materials we read and discussed in class only.
- 2. **Op-Ed (30%):** Each student will write one op-ed piece applying anthropological insights to current nuclear issues. The goal of an op-ed is to take a stance and make a point about those events with supporting evidence. Final document is to be approximately 1000-1500 words in length. Op-ed guidelines will be circulated in class. Due on blackboard: **Monday April 29.**
- 3. Attendance and Participation (20%): Attendance and in-class participation are an important component of this class. I often set aside discussion time at the end of the lecture, or ask you at the beginning to comment on the day's readings. Being an active in-class participant means that you have read all of the assigned texts, thought about them deeply, and are ready to listen and respond respectfully to other classmates. Feel free to raise questions about the readings, including anything you did not understand. I expect that you come to class prepared to discuss the readings and to engage with the material in lecture. I will evaluate your class participation on the quality of your contributions, not just how often you speak in class. If you find speaking in lectures intimidating, you may discuss class material with me during office hours. Please note that attendance, while essential, is not equivalent to participation.

Grading Scale

100% - 90% = A 86% - 80% = B 75% - 70% = C 66% - 60% = D

Course Schedule

Week 1: Introduction; the Birth and Legacies of the Atomic Age Overview

Monday, January 14

Introductions and syllabus overview; nuke map; our nuclear world—from Radium Girls to mutant ecologies: why study the atomic age?

READ: NONE

Wednesday, January 16

Anthropocene, structural violence, birth and the legacies of the nuclear age; radiogenic communities, nuclear colonialism, nuclear fuel cycle

READ: 1. Albert Einstein's letter to Franklin D. Roosevelt

2. Barbara Rose Johnston "Half-Lives, Half-Truths and Other Radioactive Legacies of the Cold War." Barbara Rose Johnston ed. *Half-Lives & Half-Truths: Confronting the Radioactive Legacies of the Cold War.* 2007. Santa Fe, NM: SAR. (pp. 1-23).

Friday, January 21

Nuclear fission, radiation science, slow violence, risk society, invisible harm, toxic layering, toxicity and scientific knowledge production, Cold War secrecy, subjectivities, radiogenic communities, technophilia and the politics of nuclear science

- **READ:** 1. Goldstein, Donna. 2017. "Invisible Harm: Science, Subjectivity and the Things We Cannot See." *Culture, Theory and Critique*. 58(4): 321-329.
 - 2. **Recommended:** Goldstein, Donna and Magdalena Stawkowski. 2015. "James V. Neel and Yuri E. Dubrova: Cold War Debates and the Genetic Effects of Low-Dose Radiation." *Journal of the History of Biology.* 48(1): 67-98.

Week 2: The Manhattan Project

Monday, January 21 (No Class)

~~~~~Dr. Martin Luther King, Jr. Day!~~~~~

Wednesday, January 23

Watch film (in class): "The Moment in Time: The Manhattan Project" (56 minutes)

READ: 1. "The Manhattan Project." Available online: https://www.atomicheritage.org/history/manhattan-project

Friday, January 25 (No Class: Svalbard, Norway meetings)

READ: NONE. Read for next week

Week 3: Hiroshima and Nagasaki

Monday, January 28

The bombings of Hiroshima and Nagasaki, survival, consequences; short video documenting the aftermath

- **READ:** 1. Hachiya, Michihiko. 1955. *Hiroshima Diary* [Excerpt]. Chapel Hill: Avon Publications. pp. 1-10.
 - 2. Wallerstein, Alex. 2015. "Nagasaki: The Last Bomb." *The New Yorker*. Available online: https://www.newyorker.com/tech/annals-of-technology/nagasaki-the-last-bomb
 - 3. Recommended: Hersey, John. 1946. "Hiroshima." The New Yorker. pp. 15-68.

Wednesday, January 30

Survival, Hibakusha, a-bomb victims, scientific and legal discourses on radiation illness, radiation as pollution, hegemony, Atomic Bomb Casualty Commission, polluted bodies

READ: 1. Todeschini, Maya. 1999. "Illegitimate Sufferers: A-Bomb Victims, Medical Science, and the Government." *Daedalus*. 128(2): 67-100.

Friday, February 1

Decision to drop the bomb debates

- **READ:** 1. Stimson, Henry. 1947. "The Decision to Use the Atomic Bomb." *Harper's Magazine*.
- 2. Wilson, Ward. 2013. "The Bomb Didn't Beat Japan...Stalin Did." *Foreign Policy*. Available online: https://foreignpolicy.com/2013/05/30/the-bomb-didnt-beat-japan-stalin-did/
- 3. **Recommended:** Boyer, Paul. 1995. "Exotic Resonances: Hiroshima in American Memory." *Diplomatic History*. 19(2): 297-318.
- 4. **Recommended:** Bernstein, Barton. 1995. "The Atomic Bombings Reconsidered." *Foreign Affairs.* 74(1): 135-152.
- 5. **Recommended:** Sherwin, Martin. 1995. "Hiroshima as Politics and History." *The American History*. 82(3): 1085-1093.

Questions to consider: 1) On what basis does Stimson justify the use of the atomic bombs on Hiroshima and Nagasaki?; 2) If you were an American

journalist with the opportunity to ask Stimson three questions regarding the decision to drop the bombs, what would those questions be?; 3) What is your position on the decision to use the atomic bomb?

Week 4: Military Spectacles and the Emergence of Nuclear States: Nuclear Testing in the Pacific— The Marshall Islands

Monday, February 4

Ecosystems ecologies, radioactive aftermath, island laboratories, myth of isolation, geographies of sacrifice, atomic modernity, photography and fallout fears, "Operation Crossroads," Cold War, ethnography, land from the Marshallese perspective, customary rules and traditions

READ: 1. Johnston and Barker. 2008. *The Rongelap Report: Consequential Damages of Nuclear War.* New York: Routledge. pp. 11-34; 43-55; 57-88.

Wednesday, February 6

Bravo test, evacuation, human subject research, community fragmentation

READ: 1. Johnston and Barker. 2008. *The Rongelap Report: Consequential Damages of Nuclear War.* New York: Routledge. pp. 89-171.

Friday, February 8

Social, political, and economic damages. Start watching film (in class): "Radio Bikini" (56 minutes) or "Nuclear Savage" (56 minutes)?—you choose

READ: 1. Johnston and Barker. 2008. *The Rongelap Report: Consequential Damages of Nuclear War*. New York: Routledge. pp. 173-223; Epilogue.

Week 5: Marshall Islands Continued; Cold War Nuclear Arms Race and Cold War Culture: Fear and Representation of Radiation

Monday, February 11

Finish book and watching film; book discussion

READ: 1. NONE

Wednesday, February 13

"Deterrence" policy, MAD, duck and cover drills, civil defense, nuclear warfare, nuclear arms race, fallout, Soviet atomic testing, early Cold War era propaganda, Disney, gendered nuclear discourse

- **READ:** 1. Schelling, Thomas. 1960. "Meteors, Mischief, and War." *Bulletin of the Atomic Scientists*. 16(7): 292-300.
 - 2. Gusterson, Hugh. 2009. "Narrating Abolition." *Bulletin of the Atomic Scientists*. 65(3): 13-18.
 - 3. Cohn, Carol. 1987. "Sex and Death in the Rational World of Defense Intellectuals." *Signs.* 12(4): 687-718.

Friday, February 15

Start watching film (in class): "The Atomic Café" (86 minutes)

- **READ:** 1. Jacobs, Robert. 2010. "Atomic Kids: Duck and Cover and Atomic Alert Teach American Children How to Survive Atomic Attack." *Journal of Film and Television Studies*. 40(1): 25-44.
- 2. **Recommended:** Masco, Joseph. 2009. "Life Underground: Building the Bunker Society." *Anthropology Now.* 1(2): 13-29.

<u>Week 6: Fear and Representation of Radiation Continued; Atoms for Peace Program and Visions</u> for the Nuclear Future

Monday, February 18

Finish watching film (in class): "The Atomic Café"; article and film discussion

READ: 1. Masco, Joseph. 2008. "Survival is Your Business: Engineering Ruins and Affect in Nuclear America." *Cultural Anthropology*. 23(2): 361-398.

Wednesday, February 20

Atoms for Peace, Plowshare program, Soviet and American "earth moving" as progress, discourse on nuclear future, scientific internationalism, policy of containment, deterrence

READ: 1. Krige, John. 2006. "Atoms for Peace, Scientific Internationalism, and Scientific Intelligence." *Osiris*. 21(1): 161-181.

Friday, February 22

Atomic gardening and atomic medicine, atomic car

READ: 1. Youssef, Sharif. 2017. "Atom in the Garden of Eden." Available online: https://99percentinvisible.org/episode/atom-garden-eden/

- **2.** Creager, Angela. 2006. "Nuclear Energy in the Service of Biomedicine: The U.S. Atomic Energy Commission's Radioisotope Program, 1946-1950." *Journal of the History of Biology*. 39(4): 649-684.
- 3. Atomic automobile: https://www.voutube.com/watch?v=ZdxibxcTc6U

[EXAM #1 DUE TODAY!]

Week 7: Radioisotopes, Environment, Secrecy, and Health: The Social and Environmental Disasters Under Capitalism and Communism

Monday, February 25

Incarcerated spaces, nationalism, toxicity, secrecy, human health, plutopia, middle-class prosperity, permanent war economy

READ: 1. Brown, Kate. 2013. *Plutopia: Nuclear Families, Atomic Cities, and the Great Soviet and American Plutonium Disasters*. Oxford: Oxford University Press. pp. Introduction

Part I.

Wednesday, February 27

Risk society, accidents, East and West radiation science, economic prosperity, Gulag and atomic powered communism, citizen guinea pigs, human radiation experiments--plutonium

READ: 1. Brown, Kate. 2013. *Plutopia: Nuclear Families, Atomic Cities, and the Great Soviet and American Plutonium Disasters*. Oxford: Oxford University Press. pp. Part II.

Friday, March 1

Watch film (in class): "Chelyabinsk: The Most Contaminated Spot on the Planet" (60 minutes)

READ: 1. Brown, Kate. 2013. *Plutopia: Nuclear Families, Atomic Cities, and the Great Soviet and American Plutonium Disasters*. Oxford: Oxford University Press. pp. Part III.

Week 8: Radioisotopes, Environment, Secrecy, and Health: Military-Industrial Atomic Cities Under Capitalism and Communism Continued; Nuclear Exceptionalism and Nuclear Accidents

Monday, March 4

Finish watching film (in class): "Chelyabinsk" and book discussion

READ: 1. Brown, Kate. 2013. *Plutopia: Nuclear Families, Atomic Cities, and the Great Soviet and American Plutonium Disasters*. Oxford: Oxford University Press. pp. Part IV.

Wednesday, March 6

End of Cold War, glasnost, perestroika, nuclear weapons accidents in the US, risk, nuclearity, what counts as being nuclear

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

Friday, March 8

Nuclear exceptionalism, nuclear orientalism, non-proliferation, western imagination, deterrence

- **READ:** 1. Gusterson, Hugh. 2004. "Nuclear Weapons and the Other in the Western Imagination." *Cultural Anthropology.* 14(1): 111-143.
 - 2. Department of Defense, "Narrative Summaries of Accidents Involving US Nuclear Weapons, 1950-1980." Read the first two pages and browse the rest.

Week 9: NO CLASSES

~~~~SPRING BREAK!!!!!~~~~~~

Week 10: Nuclear Power, Chernobyl Catastrophe, and Cultural Fallout

Monday, March 18

Slow violence, Chernobyl accident, radiophobia, scientific debates about radiation effects

READ: 1. Alexievich, Svetlana. 2006. *Voices from Chernobyl: The Oral History of a Nuclear Disaster*. New York: Picador. pp. 1-80.

Wednesday, March 20

Radioactive life in the Chernobyl Zone, barter economies, state abandonment, exclusion zone, biological citizenship

- **READ:** 1. Alexievich, Svetlana. 2006. *Voices from Chernobyl.* pp. 81-149.
 - 2. Brown, Kate and Olha Martynyuk. 2016. "The Harvests of Chernobyl." Aeon. pp. 1-7.

Friday, March 22

Begin watching film (in class): "The Babushkas of Chernobyl" (70 minutes).

READ: 1. *Voices from Chernobyl...*pp. 151-183.

Week 11: Nuclear Power, Chernobyl Catastrophe, and Cultural Fallout Continued

Monday, March 25

Finish watching film (in class): "The Babushkas of Chernobyl" (2015). Book and film discussion.

READ: 1. Voices from Chernobyl ... pp. 183-236.

Wednesday, March 27

Chernobyl effects elsewhere: Cultural fallout in the Norwegian Sami region, reindeer herding economies, social dislocation, contamination of food sources, biological amplifiers, political response to Chernobyl fallout (France, Italy, Germany, Norway)

READ: 1. Stephens, Sharon. 1987. "Chernobyl Fallout: A Hard Rain for the Sami." *Cultural Survival Quarterly Magazine*. Available online:

https://www.culturalsurvival.org/publications/cultural-survival-quarterly/chernobyl-fallout-hard-rain-sami

Friday, March 29

Op-Ed workshop and discussion; three minute op-ed pitch

READ: NONE

Week 12: Nuclear Power: Fukushima, Hopkins, South Carolina, and Navajo Uranium Miners—Invisible Harms and Environmental Justice

Monday, April 1

Fukushima Daiichi nuclear power plant, citizen science, neoliberal subjects, food safety, language of food safety, dissemination of knowledge, risk, nuclear power as clean alternative

- **READ:** 1. Sternsdorff-Cisterna, Nicolas. 2015. "Food after Fukushima: Risk and Scientific Citizenship in Japan." *American Anthropologist.* 117(3):455-467.
 - 2. Phillips, Sarah. 2013. "Fukushima is not Chernobyl? Don't Be So Sure." *Somatosphere*. Available online: http://somatosphere.net/2013/03/fukushima-is-not-chernobyl-dont-be-so-sure.html

Wednesday, April 3

Uranium leak in Hopkins, South Carolina

READ: 1. U.S. News, 2018. "Regulators: Uranium Leaked as S. Carolina Nuclear Fuel Plant." Available online: https://www.usnews.com/news/best-states/south-carolina/articles/2018-07-25/regulators-uranium-leaked-at-s-carolina-nuclear-fuel-plant 2. The Seattle Times, 2017. "No Clean-Up of Nuclear Leak in South Carolina for Years." Available online: https://www.seattletimes.com/business/no-clean-up-of-nuclear-leak-in-south-carolina-for-years/

Friday, April 5

Energy infrastructures, U.S. colonialism, landscapes of power, Navajo energy history, uranium and oil, environmental justice

READ: 1. Powell, Dana. 2018. "Preface" and "Introduction: Changing Climates of Colonialism." In: *Landscapes of Power: Politics of Energy in the Navajo Nation*. Durham: Duke University Press. pp. xii-xvi; 1-18.

[EXAM #2 DUE TODAY!]

Week 13: Mutant Life in Kazakhstan's Radioactive Zone: Embracing Radiation

Monday, April 8

Semipalatinsk nuclear test site, mutant subjectivity, economic collapse, poverty, zones of social abandonment, mutant discourse, western radiation science effects

- **READ:** 1. Stawkowski, Magdalena. 2016. "I am a Radioactive Mutant: Emergent Biological Subjectivities at Kazakhstan's Semipalatinsk Nuclear Test Site. *American Ethnologist*. 43(1): 144-157.
 - 2. **Recommended:** Masco, Joseph. 2004. "Mutant Ecologies: Radioactive Life in Post-Cold War New Mexico." *Cultural Anthropology*. 19(4):517-550.

Wednesday, April 10

Watch film (in class): "After the Apocalypse" (65 minutes).

READ: 1. **Recommended:** Stawkowski, Magdalena. 2017. "Radiophobia Had to Be Reinvented." *Culture, Theory and Critique.* 58(4): 357-374.

Friday, April 12

Finish watching film (in class); discussion

READ: NONE

Week 14: Atomic Nostalgia

Monday, April 15

Oak Ridge Tennessee, atomic nostalgia, collective memory

READ: 1. Freeman, Lindsey. 2015. *Longing for the Bomb: Oak Ridge and Atomic Nostalgia*. Chapel Hill: The University of North Carolina Press. pp. prologue; 1-79

Wednesday, April 17

Espionage, clearance, normalization, atomic image, atomic exhibits

READ: 1. Freeman, Lindsey. 2015. *Longing for the Bomb: Oak Ridge and Atomic Nostalgia*. Chapel Hill: The University of North Carolina Press. pp. 80-137

Friday, April 19

Atomic tourism, museums, role of photography, future of nostalgia

READ: 1. Freeman, Lindsey. 2015. *Longing for the Bomb: Oak Ridge and Atomic Nostalgia.* Chapel Hill: The University of North Carolina Press. pp. 138-177.

Week 15: Nuclear Waste and Where Do We Go From Here?; Wrap-Up

Monday, April 22

Wastelands, nuclear wilderness, conservation politics, containment, environmental salvation

READ: 1. Cram, Shannon. 2016. "Wild and Scenic Wasteland: Conservation Politics in the Nuclear Wilderness." *Environmental Humanities*. 7(1): 89-105.

Wednesday, April 24

Nuclear waste and deep time; radioactive cats, Yucca Mountain, Carlsbad, New Mexico, Norway

READ: 1. Kabil, Ahmed. "Just How Big of a Problem is Nuclear Waste? The Other 10,000 Year Project." *Medium.* Available online: https://medium.com/the-long-now-foundation/the-other-10-000-year-project-51425d40f93

Friday, April 26

Wrap-up. Watch excerpts from "Dr. Strangelove or: How I Learned to Stop Worrying and Love the Bomb"

READ: NONE

Week 16: Op-Ed Assignment due

Monday, April 29 (Last Day of Class!—NO LECTURE TODAY)

[OP-ED ASSIGNMENT DUE TODAY, BY MIDNIGHT, ON BLACKBOARD!]