

SUST 402.002*/GEOG 499.006 Topics: Nuclear New Mexico

Fall 2015

Tues/Thurs 3:30-4:45pm

Dane Smith Hall 231

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Office Hours: Monday 10:15- 11:45 am or by appointment



Photo of the first atomic explosion at Trinity Site, New Mexico
Courtesy of: <http://www.white-sands-new-mexico.com/military.htm>

As the birthplace of the bomb and also as a main-player in the current nuclear weapons industry, New Mexico is a rich source of study for all things “nuclear.” In this course, we will explore multiple aspects of nuclearism in the Southwest, including environmental justice issues, environmental racism, radioactive colonialism, atomic tourism, and the global implications of “the bomb.” How does the ubiquitous presence of nuclearism in the Southwest impede our ability to live sustainably? What social justice concerns must we confront and what communities most bear the brunt of those concerns? We will take an interdisciplinary and critical approach to answering these questions and more throughout this course.

Course Objectives:

- To gain a thorough understanding of the historical, environmental, and socio-cultural impacts of “the bomb” on our local communities.
- To be able to identify social equity issues regarding race, class, and gender related to nuclearism.

- To strengthen critical thinking skills through intensive writing, reading, and discussion.
- To sharpen students' ability to ask critical questions and contextualize conversations about sustainability and environmental justice within current activism and scholarship.

Required Texts:

- VB Price. *The Orphaned Land: New Mexico's Environment Since the Manhattan Project*. University of New Mexico Press, 2011.
- Leslie Marmon Silko. *Ceremony* Penguin Books, 1986.
- Various articles available on our class UNM Learn website (<https://learn.unm.edu/>).

Grading Scheme:

Undergraduate Students:

Class Participation:	15%
Midterm:	10%
Reading Responses:	20%
Community Hours:	10%
Field Trip Critical Reflection/Class Facilitation:	15%
Final Project:	30%

Graduate Students:

Class Participation:	15%
Reading Responses:	20%
Class Facilitation:	15%
Community Hours:	10%
Field Trip Critical Reflection:	10%
Conference paper:	30%

Class Participation:

This class relies on the intellectual commitment and active participation of all students. In order for the course to be effective, you **MUST** have the reading assignments completed and ready for in-depth discussion for each meeting. Active listening and mutual respect are requirements for this course. Our course covers topics that you may not agree with or may elicit intense and emotional reactions from you. While some readings may challenge you or make you feel uncomfortable, take this as sign that you are learning and pushing the boundaries of what you take for granted. I ask that you keep an open mind and challenge yourself while being respectful of the authors we read, your fellow classmates, and me. Hate speech, constant interruptions, and disrespect will not be tolerated.

Please turn off and put away all cell phones during class. Refrain from facebook, email, and anything other than a word doc for note-taking as it is distracting to all around you.

Reading Responses:

For EACH assigned reading, you will be expected to write one paragraph (4 sentences minimum) that explains *in your own words*:

- 1.) the author's main arguments
- 2.) the author's intended audience
- 3.) their sources
- 4.) Lastly, you will write one question the reading brought up for you and one comment you have about the reading.

The bulk of your response should be a summary of the author's main arguments; please reserve your opinion about the piece for the comment and question section of the response. I will collect hard copies of the reading journals every day there is a reading assigned and grade them on a complete/not-complete grading scale. I will give half credit for late journals. You may hand-write (in legible writing) your response or type it out- **no email submissions will be accepted**. It is very important that you stay on top of your Reading Journals because you may be called on in class to help facilitate our discussion of a reading with your comment or question

Important Note: It is my experience that reading about these topics can lead to "burnout" and/or a time of feeling emotionally overwhelmed. Knowing this, I will allow you to take one full week off of reading responses with no penalty. Keep this in mind throughout the semester and use it when you need it.

Class Facilitation:

Every student will get the chance to help facilitate our class discussion on one of the readings. Each undergraduate student will be required to pair up with one or two other students to help lead class discussion of an assigned reading. You will be required to provide a brief summary of the reading's main points, audience, and sources and at least 4 discussion questions for the class, typed out and due to the instructor on the day of the facilitation (one per group.) You will not be required to submit a reading response for the reading that you facilitate.

Graduate students will also be required to facilitate discussion AND present on a topic related to our course themes. You will provide a brief powerpoint (or other visual) and presentation with a background on your chosen topic and facilitate a discussion of the topic that includes our related class readings. The presentation should deepen our understanding of a topic or issue related to nuclearism.

Graduate Students:

Graduate students in SUST 402*/GEOG 499 will be expected to complete all assignments that undergraduates students are required to complete (with the exception of the Midterm Exam), and will also be expected to present on one topic related to course themes and facilitate discussion on this topic. Graduate students will also be required to write short conference-style papers at the end of the course instead of the final exam. The paper's length and topic will be decided after a consultation with the instructor. The paper comes due on December 10th.

Field Trip Critical Reflections:

You are required to attend at least ONE of the two Saturday field trips (Trinity Site on Oct. 3rd or Los Alamos on Oct. 31st) in addition to the class trip to the NMNSH in Albuquerque. After attending these field trips, you will write a critical reflection in which you compare the sites you visited, and tie in your original observations with our course material. Your paper should be 3-5 pages double-space and type-written with a bibliography. The reflection must follow the specific guidelines that will be provided in class and cite at least 3 sources from our class readings and 2 outside scholarly sources. More information will be provided in class.

Community Hours:

A central facet of the Sustainability Studies Program is bridging the gap between theory and action/activism. In this course, you are required to log 10 “Community Hours” in which you connect the topics of this course with events, organizations, and activism within our wider community. I will share many opportunities via email and in class such as public lectures, events, and volunteer opportunities that will count towards these hours. You need to keep a log of your hours (how many hours at each event), get a signature if possible or provide a brochure, and write a one-paragraph reflection on the hours and how they complimented your learning in our course. Be sure to email me ahead of time if you are unsure if an event will count towards these hours.

Final Projects:

Students will have the opportunity to create original projects that align with our course topics. You will have the option to pair with one or two other students in your project, or to work alone. Ideally, your projects will respond creatively to the social justice issues brought up by our discussions, speakers, and reading material. Possible projects include: creating a website with information about the health impacts of radiation; putting together a “Toxic Tour” of an area of our local community, organizing a panel discussion with local activists on nuclear issues...the sky is the limit. Go with your passions and as well as your gifts.

You will turn in a proposal for your project on September 22nd and an outline on October 13th. You will present your final project on Dec. 10th and turn in a short reflection paper about the work you did over the semester.

Attendance Policy and Late Work:

Regular attendance is crucial to maintaining a committed and vibrant intellectual atmosphere. You are allowed TWO absences, and after two absences **your overall participation grade will be lowered by 5 points for each additional absence.**

Documented medical and family emergencies are not included. (Note: Stellar participation in class has the potential to raise a borderline grade. Attendance problems or lack of engagement can lower your grade.) Unless you have made prior arrangements with me, late papers will be graded after a 10% reduction **for each day past the due date.** This does not apply to documented medical or family emergencies. Late reading responses will receive half credit.

Academic Dishonesty:

See pathfinder.unm.edu/common/policies/academic-dishonesty.html for the official policy. Let me know if you have any questions. Always cite your sources (whether you quote directly or paraphrase) to clearly to avoid problems with plagiarism. We will discuss plagiarism in detail at the beginning of the course so as to avoid any confusion.

Special Accommodations:

If you have or believe you have a disability, you may self-identify by providing documentation to the Accessibility Resource Center (ARC). ARC's phone number is 505-277-3506 and you can send an email to arcstaff@unm.edu for details on how to obtain services. Appropriate accommodations will then be provided for you.

Sustainability Studies Community:

Please stop by the SUST kitchen and conference room in Room 163 of Castetter Hall. Have lunch, hang out, study, and create community!

For advising help regarding the Sustainability Studies Program, please schedule an appointment with Terry Horger through Lobo Achieve. You may also email her with specific questions at thorger@unm.edu.

Class Schedule:

***Note*:** I don't plan on it, but I reserve the right to change our schedule if I deem necessary. I will always give as much advance notice as I can and communicate the changes both in class and via email.

Week 1: Introductions, Origin Stories, and Nuclearism

Tuesday, Aug. 18th:

Topics:

- 1. Introductions**
- 2. Go Over Syllabus, Class Structure, Reading Journals**

Watch the beginning of *Oliver Stone's Untold History of the United States: The Bomb*

**** On Wednesday, Aug. 19th at 7pm, David Culp (Legislative Rep on Nuclear Disarmament) will be speaking at the ABQ Friends Meeting House(1600 5TH ST. NW).**

TITLE: "NUCLEAR NEW MEXICO: A SECOND NUCLEAR AGE OR A DISARMAMENT FUTURE"* Attendance at this event will count towards your community outreach hours**

Thursday, Aug. 20th:

Topics:

- 1. Origin Stories about the Bomb**
- 2. An Interdisciplinary Introduction to Nuclearism**

Readings:

- “Introduction and The Origins of Los Alamos” from *The Day the Sun Rose Twice* by Ferenc Szasz
- “Nuclearism” by Robert Jay Lifton

Due: Reading responses

**** Aug. 20th: “Artistic Bombs: Cultural Responses to LANL” presentation by Dr. Daniel Arbino, Zimmerman Library, Waters Room 12-1pm**** *Attendance at this event will count towards your community outreach hours*

Week 2: Post-Cold War New Mexico and Uranium

Tuesday, Aug. 25th:

Topics:

- 1. Post- Cold War New Mexico**
- 2. The Uranium Economy**

Readings:

- Ch. 1: “Key Impacts on the New Mexico Environment in *The Orphaned Land*, VB Price
- “What is Uranium? How Does it Work?” World Nuclear Association

Due: Reading responses

Thursday, Aug. 27th:

Topics:

- 1. The “Front End” of the Nuclear Fuel Cycle**
- 3. Uranium Mining & Milling and Indigenous Communities**

Readings:

- “Native Americans and Uranium Mining as State-Corporate Crime” by Linda Robyn

Guest Speaker: Leona Morgan from *Diné No Nukes*

Due: Reading responses

Week 3: Settler Colonialism and Radioactive Colonialism

Tuesday, Sept. 1st:

Topics:

- 1. New Mexico’s Colonial Past and Present**
- 2. Radioactive Colonialism: What is it?**

Readings:

- “Native America: The Political Economy of Radioactive Colonialism” by Winona LaDuke and Ward Churchill
- Excerpts from *The Militarization of Indian Country* by Winona LaDuke.

Due: Reading responses

Thursday, Sept. 3rd:

Topics:

- 1. Settler Colonialism and Nuclearism**
- 2. Understanding Present-Day LANL**

Readings:

- “Nuclear Natures: In the Shadows of the City on the Hill” from *Understories* by Jake Kosek

Due: Reading Responses

Week 4: Science as Violence? The Logic of Progress

Tuesday, Sept. 8th:

Topics:

- 1. Science, Gender, and Violence**
- 2. What is Progress?**

Readings:

- “Science, Nature, and Gender” by Vandana Shiva
- “Science” from *Welcome to the Machine* by Derrick Jensen

Due: Reading responses

Thursday, Sept. 10th:

Topics:

- 1. Science, Gender, and Violence**
- 2. Human Experimentation**
- 3. Knowledge at What Cost?**

Readings:

- Selections from *The Plutonium Files* by Eileen Welsome

Due: Reading responses

Week 5: Nuclear Wasteland and Nuclear Testing
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Tuesday, Sept. 15th:

Topics:

1. Nuclear Waste: What is it? Where does it go?

Readings:

- “Nuclear Wasteland” from *The Tainted Desert* by Valerie Kuletz

Due: Reading responses

Guest Speaker: Janet Greenwald from *Citizens Against Radioactive Dumping (CARD)*

Thursday, Sept. 17th:

Topics:

1. Nuclear Testing/ “Rehearshals”

Readings:

- “Nuclear Technoesthetics: The Sensory Politics of the Bomb in Los Alamos” Joseph Masco

Due: Reading responses

Week 6: Feminist Perspectives on the Bomb
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Tuesday, Sept. 22nd:

Topics:

1. Gendering the Bomb

2. Language as Power

Readings:

- “Sex and Death in the Rational World of Defense Intellectuals” by Carol Cohn

Due: Reading responses and **Final Project Proposals**

Thursday, Sept. 24th:

Topics:

1. Feminism and Nuclearism

2. Sexual Violence and Nuclearism

Readings:

- “Explosive Issues: Sex, Women, and the Bomb” from *Homeward Bound* by Elaine Tyler May
- “The Nuclear Family Goes Critical” and “Respecting Limits: Not Going ‘Where No Man Has Gone Before’” in *Gossips, Gorgons & Crones* by Jane Caputi

Due: Reading responses

Week 7: Atomic Tourism

Tuesday, Sept. 29th:

Field trip to the National Museum of Nuclear Science and History (NMNSH) in Albuquerque

Reading:

- “Tourism and ‘Sacred Ground’: The Space of Ground Zero” from *Tourists of History* by Marita Sturken

Due: Reading response

Thursday, Oct. 1st:

Topics:

- 1. Atomic Tourism and “Consuming” the Bomb**
- 2. The Trinity Site**
- 3. Atomic Souvenirs: Power, Representation, and**

Readings:

- “A Consumer’s Landscape” from *Range Wars*, Ryan Edgington
- “Atomic Tourism” Hugh Gusterson

Due: Reading responses

****FIELD TRIP TO THE TRINITY SITE: SATURDAY, OCTOBER 3, 2015****

Week 8: The Waste Isolation Pilot Plant (WIPP) and Sandia’s Mixed Waste Landfill

Tuesday, Oct. 6th:

Topics:

- 1. WIPP and Sandia’s Mixed Waste Landfill**
- 2. Nuclear Waste Storage in the Future**

Reading:

- “Toxic Waste: Everything Has to Go Somewhere” from *The Orphaned Land* by V.B. Price
- “This Place is Not a Place of Honor” Sandia National Laboratories Report

Due: Reading responses

Guest Speaker: Don Hancock from the *Southwest Research and Information Center* (SRIC)

Thursday, Oct. 8th:

FALL BREAK: No Class

Week 9: Midterm

Tuesday, Oct. 13th:

Midterm Review

Final Project Outline Due

****Vandana Shiva Event**** *Attendance at this event will count towards your community outreach hours*

Thursday, Oct. 15th: Midterm Exam

Week 10: From New Mexico to Fukushima: Global Implications of Nuclearism, and Nuclear Orientalism

Tuesday, Oct. 20th:

Topics:

1. Fukushima Daiichi Meltdown
2. The Connection Between Nuclear Power and Nuclear Weapons

Reading:

- "Tragedy at Fukushima Daiichi" James Mahaffey from Atomic Accidents
- Excerpts from *Devil's Tango: How I Learned the Fukushima Step by Step* by Cecile Pineda

Due: Reading responses

Thursday, Oct. 22nd:

Topics:

1. Nuclear Orientalism

Reading:

- "Nuclear Weapons and the Other in the Western Imagination" by Hugh Gusterson

Due: Reading responses

Week 11: Environmental Racism and Sacrifice Zones

Tuesday, Oct. 27th:

Topics:

1. Environmental Racism: What is it?
2. Sacrifice Zones: Racism Inscribed in Geography
3. Reference Man

Reading:

- “Environmental Discrimination: Dumping on the Poor” from *The Orphaned Land* by V.B. Price

Due: Reading responses

In-class films: *The Return of Navajo Boy* or *Radio Bikini*

Thursday, Oct. 29th:

Topics:

1. Environmental Racism: Connections to Gender, Colonialism, Militarism, and Sexual Violence

Reading:

- “Rape of the Land” from *Conquest* by Andrea Smith
- “Patriarchal Vandalism: Militaries and the Environment” Joni Seager

Due: Reading responses

****FIELD TRIP TO LOS ALAMOS: SATURDAY, OCTOBER 31ST****

Week 12: Nuclear Fear, the “Nuclear Uncanny,” and Cultural Responses to the Bomb

Tuesday, Nov. 3rd:

Topics:

1. Nuclear Fear and the “Nuclear Uncanny”

Reading:

- “The Enlightened Earth” Joseph Masco

Due: Reading responses

Thursday, Nov. 5th:

Topics:

1. Cultural Responses to the Bomb
2. Sci-fi, Cold War Films and Beyond

Reading:

- “Mutant Ecologies: Radioactive Life in Post-Cold War New Mexico”, Joseph Masco
- “The Nuclear Mushroom Cloud as Cultural Image” by Peggy Rosenthal
- Excerpt from *Dr. Strangelove’s America* by Margot Henriksen

Due: Reading responses

Week 13: Future Technologies and the Full Impact of Nuclearism on Policy, Science and Culture
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Tuesday, Nov. 10th:

Topics:

1. Climate Change, Apocalyptic Imagery, and Nuclearism

Reading:

- “Bad Weather: On Planetary Crisis” by Joseph Masco
“Echoes of the Cold War: The Aftermath of September

Due: Reading responses

Thursday, Nov. 12th:

Topics:

1. Nuclear Policy

Reading:

- “Excerpts from *Bomb Power*, Garry Wills

Due: Reading Responses

Week 14: Resistance, Resilience, and Activism
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Tuesday, Nov. 17th:

Topics:

1. Local Activism

Reading:

- Excerpts from *The Nukes Next Door: Shedding Light on a Nuclear Neighbor...* Sandia National Labs by SLAP

Due: Reading Responses

Thursday, Nov. 19th:

Topics:

1. Creative Activism: Murals, Art, and Social Change

Reading:

- “The Billboard Campaign: The Los Alamos Study Group and the Nuclear Public Sphere” Joseph Masco

Due: Reading Responses

Week 15: Ceremony Pt. 1

Tuesday, Nov. 24th:

Topics:

1. Leslie Marmon Silko’s *Ceremony*

Reading:

- *Ceremony* p.1-78

Due: Reading responses

Thursday, Nov. 26th: UNTHANKSGIVING BREAK (Read the rest of *Ceremony*!)

Week 16: <i>Ceremony</i> Pt. 2 and Final Projects
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Tuesday, Dec. 1st:

Topics:

1. **Leslie Marmon Silko's *Ceremony* continued**

Reading:

- *Ceremony* p.78- end

Due: Reading responses

Thursday, Dec. 3rd:

Topics:

1. **Final Prep and Practice for Presentations**
2. **Wrapping Up Loose Ends**

Due: Community Hours Log Sheet

Week 17: Finals Presentations, Final Projects
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Thursday, Dec. 10th (3:00-5pm): Location TBA