

ENVS 411, Hanford Nuclear Site: Environmental Disaster Close to Home
Spring 2013, CRN: 32989

Erica Elliott
eelliott1@uoregon.edu

Class Meets: MW, 12 - 1:50 p.m., 142 Columbia
Office hour: Mon 2-3 p.m., Tues 12:20-1:30 & by appt.
Office hour meets in COL 47A

COURSE DESCRIPTION

In 1943, the U.S. government claimed 670 square miles of land along the Columbia River in southeastern Washington and began constructing the Hanford Engineer Works. Under the auspices of the Manhattan Project, workers at Hanford processed plutonium for the bomb that was dropped on Nagasaki two years later. Today, Hanford is the site of the largest environmental cleanup project in the world.

This class will explore the history of Hanford's landscape and people, as well as the Site's connections with other parts of the "Atomic West" and the world. As an upper-level course in Environmental Studies, this class will draw on materials from several disciplines including geography, history, ecology, and English. By using Hanford as a case study, we will explore topics as diverse as: patterns of environmental exploitation in the West, Native American treaty rights, environmental justice, remediation and restoration, the politics of storing nuclear waste, risk calculation, the impact of nuclear weapons production on human health, and how we come to terms with waste that will never – at least within a human timescale – decay. Along the way, we'll look at cultural representations of the nuclear weapons complex and investigate the lived experience of weapons production. The format of the class will be a mixture of lecture, discussion, small group work, guest lectures, and examination of texts, maps, and films.

Given recent developments at Hanford, including revelations about leaking waste tanks, problems with the design and construction of the Waste Treatment Plant (which the DOE is depending on as the best solution for stabilizing radioactive and chemical waste), and proposals to make Hanford part of a multi-site Manhattan Project National Park, the topics covered in this course will be especially timely and relevant.

REQUIRED TEXTS AND MATERIALS

*You are required to purchase two texts for this class:

1. Our course reader, which is available at the UO "Duckstore."

***You must purchase this reader, and you must bring it to class everyday.**

2. Flenniken, Kathleen. *Plume*. Seattle: U of Washington P, 2012.

*This book is also available at the Duckstore. You may be able to borrow it from the library, but **you must have a copy of it to read and bring to class with you during Week 3.**

***You will also be expected to visit Blackboard throughout the term to access readings, follow links, and find information on course assignments.**

Optional text: Gerber, Michele Stenejhem. *On the Home Front: The Cold War Legacy of the Hanford Nuclear Site*. 3rd ed. Lincoln: U of Nebraska P, 2007.

*This is the best and most comprehensive book-length work on Hanford history, pollution, and politics. It will also be available at the Duckstore.

COURSE REQUIREMENTS

1. Investment	10%
(This part of your grade includes but is not limited to: attendance, taking responsibility for your own success, respectful and thoughtful participation, out-of-class communication with me, your work ethic, and your willingness to rise to the occasion of our time together. To get full points for your investment, you might ask yourself: What can I do to make this class <i>work</i> ?)	
2. Quizzes (5% each)	15%
3. Worksheet, mapping exercise and essays	20%
4. Questions for guest speakers	10%
5. Teach-in	30%
(15% for associated assignments/15% for actual presentation)	
6. Final paper (5% for associated proposal)	15%

POLICIES

- * **Attendance:** Two absences are permitted without penalty. After that, **your final grade will be lowered a full letter grade for each class missed.** If you consistently arrive late or leave early this will also lower your grade. 3 late arrivals/early departures = 1 absence.
- * **Format for written work:** All written work for this class must be typed, double-spaced, stapled, and proofread, and it must use 1" margins all around as well as a standard system of citation (MLA or APA). Number your pages and include a bibliography of *any works cited that are not part of the class reading assignments.* (Note: You will not receive points for an assignment if you use a source without citing it.) Double-sided printing is encouraged.
- * **Late papers:** Written work will be marked down one full letter grade for each calendar day late. Please contact me well in advance if you need an extension.
- * **Please retain the original copy of all work** returned to you during the term until the final course grade has been posted. In the event of any question concerning whether grades have been accurately recorded, it is your responsibility to provide these original copies as documentation.
- * **Incompletes** are unlikely to be given and will only be considered in the event of a documented emergency.
- * **Classroom environment:** I hope that you will be excited to come to class and that you will look forward to interacting with your fellow students. I expect that we will all conduct ourselves as mature, curious, and thoughtful adults. To be more specific, I expect that you will respect your peers, make an effort to include them in conversation, come to class prepared (with readings in hand, ready to discuss and take notes), and to avoid doing any other tasks unrelated to the class (e.g., listening to music, texting, doing homework for another class, or using the Internet).
To accomplish that last goal, I will ask you to turn off your electronic devices as soon as you enter the classroom. If I see you using an electronic device for a purpose unrelated to the class, I will ask you to put it away. If this happens repeatedly, I will ask you to leave and mark you as absent. I promise that you'll get more out of your educational experience if you turn off distractions and give yourself the opportunity to listen to your instructors, fellow students, and your own internal monologue.
I also expect you to communicate with me about your progress in the course outside of class. The best way to make the most of my support and resources is to come to office hours or to make an appointment! Please don't hesitate to stop by.
- * **Academic honesty:** All work submitted for this course must be your own and be written or created exclusively for this course. The use of sources (ideas, quotations, paraphrases) must be properly documented. Please review and familiarize yourself with the provisions of the Code

of Student Conduct regarding academic honesty. You can find a summary in each term's Schedule of Classes or the Office of Student Life's Duck Guide. Violations of academic honesty will be met with disciplinary action (the usual punishment is an "F" for the course). Please see me if you have any questions about your use of sources.

- * **Individual differences:** If you experience difficulty in this course for any reason, please don't hesitate to consult with me. If you have a disability that may prevent you from fully demonstrating your abilities, you should contact me personally as soon as possible so we can discuss accommodations necessary to ensure your full participation in the class. The university offers a wide range of services to support you in your efforts to meet the course requirements, including the following:
 - * **University Teaching and Learning Center:** TLC provides numerous resources (including courses, workshops, and tutoring) to help UO students succeed. They work with a diverse student body with a wide range of needs. If you are unsure which resources would work best, they are happy to answer questions and share suggestions. Web: <http://als.uoregon.edu> --Phone: 541-346-3226.
 - * **University Counseling and Testing Center (UCTC):** The UCTC provides comprehensive mental health care and testing services to the University of Oregon campus. The primary mission of the UCTC is to provide quality clinical/therapeutic services, psychological testing and assessment, psychoeducational workshops and outreach as well as emergency services. Web: <http://counseling.uoregon.edu> -- Phone: 541-346-3227
 - * **Accessible Education Center (AEC):** The AEC coordinates services, provides advocacy and support to students with documented physical, learning, and psychological disabilities and provides assistance to the general campus community in responding appropriately to requests for accommodation based on disability. Web: <http://ds.uoregon.edu/> -- Phone: 541-346-1155, email: uoac@uoregon.edu

TENATIVE SCHEDULE

Week	Monday	Wednesday
1	4/1 Introductions. In class: Start watching <i>Arid Lands</i>.	4/3 "Thank God it's a nuclear reactor": Hanford's contradictions Finish <i>Arid Lands</i> Reader: Eliot "Hanford's Radioactive Tumbleweed", <i>Arid Lands</i> Study Guide, Gerber "Introduction," Groves "Hanford: I," and Greger "The Landscape of Memory" See BB for background reading: www.hanford.gov , www.energy.gov on Manhattan Project, Facebook & Twitter for: Hanford Site, Office of River Protection, Hanford Challenge, Ecology's Hanford Education and Outreach Network, Our Hanford History

		*Arid Lands Worksheet Due.
2	<p>4/8</p> <p>"A curiously undead fragment of the Columbia": the ongoing frontier and the apocalypse</p> <p>Reader: Harden "Wild and Scenic Atomic River," Alexie "The Powwow at the End of the World," and Limerick "The Significance of Hanford in American History"</p> <p>See BB for readings on current cleanup controversies.</p> <p>In class: Watch <i>Hanford Story: Overview</i> video</p> <p>*Quiz.</p>	<p>4/10</p> <p>"A legacy of risk, cost, and inefficiency": the nuclear weapons complex</p> <p>Reader: Hevly and Findlay "The Atomic West," Lichtenstein "The Hanford Nuclear Waste Site," and U.S. DOE Office of Environmental Management "Overview" from <i>Closing the Circle on the Splitting of the Atom</i></p> <p>See BB for more cleanup controversy.</p> <p>*In class (to be finished outside class): Mapping Exercise.</p>
3	<p>4/15</p> <p>"So proud to be a girl America could count on": Hanford, the Cold War, and white identity</p> <p>Read: Flenniken, <i>Plume</i> (available at Duckstore)</p> <p>See BB for background readings on Flenniken's work.</p> <p>APRIL 16: Flenniken Reading, 5:30 – 7:30 at Eugene Public Library</p>	<p>4/17</p> <p>"I remembered to be afraid of the dust": women, contamination, and nuclear protest</p> <p>Reader: Solnit, "From Hell to Breakfast"</p> <p>*Short Essay Due.</p>
4	<p>4/22</p> <p>"Our Homeland: A National Sacrifice Area": uranium mining on Native American lands</p> <p>Reader: Kuletz "Tragedy at the Center of the Universe," Ortiz excerpts from "Fight Back," and Navajo Nation Press Release</p> <p>See BB for background on uranium mining.</p> <p>Screening (TBA): <i>The Return of Navajo Boy</i></p>	<p>4/24</p> <p>"Radioactive colonialism": colonization of Native American lands and bodies</p> <p>Reader: LaDuke "Dumping on the Indians" and Churchill and LaDuke "Radioactive Colonialism"</p> <p>Guest speaker (tentatively scheduled): Kayla Godowa Tufti, a member of the Confederated Tribes of Warm Springs of Oregon.</p> <p>See BB for background readings.</p>
5	<p>4/29</p> <p>"We expect consultation, involvement, and agreement": calculating risk</p>	<p>5/1</p> <p>"A crisis of confidence": risk and nuclear waste transportation</p> <p>Guest visit: Ken Niles from Oregon</p>

	<p>Reader: Delistraty et al. "Radiological risk from consuming fish," Harris and Jim "A response to Delistraty et al.," and Arquette et al. "Holistic Risk-Based Environmental Decision-Making"</p> <p>*Quiz.</p> <p>*Midterm Survey.</p>	<p>Department of Energy (ODOE)</p> <p>Reader: Slovic et al. "Perceived Risk, Trust, and the Politics of Nuclear Fear," Drew et al. "Nuclear Waste Transportation"</p> <p>See BB for supplemental readings.</p> <p>*Due: Questions for Ken Niles.</p>
6	<p>5/6</p> <p>"Some of which are known to have leaked": tank waste cleanup and the Waste Treatment Plant</p> <p>Guest visit: Dr. Logan from U.S. Department of Energy (USDOE)</p> <p>See BB for link to <i>Hanford Story: Tank Waste Cleanup</i> and for readings on Hanford cleanup, the Waste Treatment Plant, etc.</p> <p>*Due: Questions for Dr. Logan.</p>	<p>5/8</p> <p>Nuclear waste storage</p> <p>Reader: Mascarelli "Funding Cut for US Nuclear Waste Dump" and Endres "Sacred Land or National Sacrifice Zone"</p> <p>See BB for background readings on Blue Ribbon Commission, Yucca Mountain and WIPP.</p>
7	<p>5/13</p> <p>"From weapons to wildlife": transforming nuclear sites into wildlife refuges</p> <p>Reader: Havlick "Logics of Change" and Wolman "Accidental Wilderness"</p> <p>See BB for readings/websites about Hanford Reach National Monument.</p>	<p>5/15</p> <p>Weapons to wildlife continued</p> <p>Reader: Whicker "Avoiding Destructive Remediation" and Kirsch "Ecologists and the experimental landscape"</p> <p>*See BB for readings on Hanford's radioactive rabbit.</p> <p>*Short Essay Due.</p>
8	<p>5/20</p> <p>Public health and worker safety</p> <p>Reader: Iversen "Mother's Day 1963"</p> <p>See BB for interviews with Iversen, background readings on nuclear weapons production and public health, and <i>Safe as Mother's Milk</i> website.</p>	<p>5/22</p> <p>Public health and worker safety continued</p> <p>Reader: Nussbaum et al. "Community-Based Participatory Health Survey" and Carpenter "Don't Breathe the Air."</p> <p>*Quiz.</p>
9	<p>5/27</p> <p>Memorial Day: No Class</p>	<p>5/29</p> <p>Reader: Schlegel "Unspoiled Nature," Weeks "Remembering Our Atomic Past," and McArdle "Anti-Nuclear Groups Protest"</p> <p>See BB for <i>Hanford Story</i> videos <i>The Future</i> and <i>River Corridor</i> as well as readings on Manhattan Project Park, public</p>

		involvement, and other topics. *Final Paper Proposal Due.
10	6/3 Teach-In Rehearsal.	6/5 *Teach-In.
11	*Final Paper Due: TBA.	