A large mural depicting an automobile factory. In the foreground, several workers are pushing a cart with a large metal engine block. The background is filled with complex machinery, including large cylindrical tanks and conveyor belts. The scene is busy and industrial, with a warm, golden light emanating from a large opening in the background. The mural is partially obscured by a large, semi-transparent white circle on the left side of the slide.

Technology & Nature in American History (01:512:329)

- Summer Session II: June 28-August 6
- Instructor: Sam Hege
(sth60@history.rutgers.edu)
- Office Hours (on Zoom): Tuesday 1:00-2:00, Thursday 6:00-7:00, or by appointment
- Course meets either WCR or WCD SAS
Core Curriculum Goals
- Course also counts toward STEM in
Society Minor/Certificate

Image Description: Mural of an interracial group of men working in automobile plant in Detroit. Workers and machines become more difficult to disentangle as the image fades into the background.

Course Description

Covering pre-colonial America to the 21st century, we will consider how the “natural” world has interacted with technological forces, ideologies, and institutions to shape American history. Through an exploration of America’s heterogeneous landscapes - from national parks to public housing projects - we will examine both how people have employed technologies as a way to subdue and control the environments around them, as well as how nature responded to such interventions.

Among other topics, we will consider the maps and rivers that helped define the country’s southern border, the formation of industrial meatpacking plants and refrigerated railcars that made beef accessible at new and cheaper scales, and the construction of private prisons in proximity to nuclear waste and other toxins. As we study these key shifts and developments throughout America’s history, we will pay particular attention to how these changes and interventions have differentially impacted the lived experiences of individuals, based on race, gender, and class. In doing so, we will seek to better understand how current public health, climate, and racial justice crises are shaped by the legacies of American interventions into the nonhuman world.

Additional topics that will be covered in this course include:

- Oyster beds and fish weirs in colonial New York
- Plantations and enslavement
- Transportation infrastructures (from canals to railroads to highways)
- Pesticides, irrigation, and industrial agriculture
- Environmental activism, specifically focusing on the Environmental Justice Movement and the United Farmworkers Movement
- American imperialism



Image description: A Black male reverend leads an interracial crowd. They are chanting and carrying signs that read “Landfills Kill!”

Course Objectives

- Develop an understanding of the methodologies and main debates in the fields of environmental history and the history of technology.
- Analyze how technologies and environments and ideas about “technology” and “environment” have changed over time.
- Analyze the increasing role of transnational and global connections to the history of American development
- Analyze the role of the state in shaping the histories environmental interventions and the development of technologies.
- Develop an understanding of the ways that technological and environmental relations, institutions, and policies have shaped race, gender, and class ideologies, hierarchies, and experiences.
- Prepare multiple short essays that synthesize both primary and secondary sources into clear and concise historical arguments
- Engage in virtual discussions that draw on primary and secondary sources

Asynchronous Format

This course is **asynchronous**, which means that you can complete each week's assignments at a time that is convenient for you. The course is organized into **6 modules** (one per each week of class). Each week, module materials will be posted early Monday morning and **all discussion posts related to that module must be completed by the following Sunday at 11:59 p.m.**

Each module will include short lecture videos introducing its major themes, corresponding slideshows, links to primary sources and additional resources, and prompts to initiate weekly discussions.

We will not plan to meet together via zoom. However, I encourage you to attend zoom office hours or email me to set up an appointment at a time that is more convenient for your schedule. Please do not hesitate to reach out if you are finding it difficult to engage with the course material in this format and we can discuss solutions and strategies.


I understand that there are a range of extenuating circumstances that might force you to fall behind in class. Everyone is doing their best to navigate the difficult conditions imposed by the pandemic. My only request is that you communicate with me about any changes to your circumstances that will require accommodations. I promise to do everything I can to make this course flexible to meet your particular situation.

Assignment 1: *Student Engagement through Canvas* (30%)

Participation will be done via weekly discussion boards. At the beginning of each week, I will create multiple discussion boards with various kinds of prompts that will help guide you through the week's material. From there, it will be up to you to carry the conversation. This can be done through a variety of forms, ranging from twitter-style posts, to uploading news items that are related to the topics for that week, to more in-depth analysis and critique of primary sources. I will monitor the discussions boards and will interject, from time to time, with additional prompts and questions to further our conversations. You will be graded both for your activity level and for the substance of your comments. Please be respectful while commenting on these threads. Debates are welcomed, but they should be done with mindfulness to others in the class. I will provide some materials about online etiquette and guidelines that will help us navigate this virtual terrain. If you are concerned about this assignment, would like to discuss expectations in further detail, or are concerned with the nature of one or more threads, please feel free to reach out or attend office hours.



Image Description: AOL Instant Messenger Logo, yellow figure running towards blue triangle




Assignment 2: *Module Response Papers* (10% each)

You will also need to complete **three** reading response papers. These must be selected out of the first five modules. Unlike discussion posts, these should be formal written essays that examine the readings and primary sources. You will be expected to identify and synthesize the readings arguments, but most importantly, you will need to make an argument about the topic yourself. For week 1, I will provide a series of possible writing prompts, but then it will be your responsibility to create and answer a specific question related to the week's topics and draw from the available resources to support your claim. Each paper should be 3 pages, double spaced, 12 point font, and in times new roman.

For each week that you choose to write a response, you will need to submit your response by Wednesday at 11:59 p.m. of the following week (so, the week 1 module response paper will be due July 7th, the week 2 response will be due July 14th, etc...).

Image description: Aerial photograph of eight large green crop circles that are outlined by a brown rim.



Assignment 3: *Independent Research Project* (30%)

In lieu of a final exam, you will be asked to develop a virtual toxic tour. This will include identifying and researching a site of your choosing. You will then assemble a “tour” of that site. This can include a history of the site, a discussion of the current status of the site, and/or a study of any ongoing political organizing happening around it. The final product can take many forms: a slideshow, a blog, videos, a podcast - this is a chance to take a risk and be creative. You will need to consult with me about your site selection by **July 18**, and the final project will be due at the end of the summer session. Further details for this project will be posted on Canvas.

Image Description: Ironbound residents marching in street, carrying banner that reads “Ironbound Committee Against Toxic Waste”



Academic Integrity

Students are expected to produce work that is original and appropriately cited. For questions concerning Rutgers policies for academic integrity, please consult: <http://academicintegrity.rutgers.edu/>

This course will use the Chicago Manual of Style for all bibliographic and citations. Please consult this resource for questions or concerns. If students have any questions concerning proper citations, please do not hesitate to ask. It is good practice to use proper citations on all written work, and they will be expected on the reading responses.

There will be a zero-tolerance policy towards acts of academic fraud and cheating. All violations will be reported to the Office of Student Conduct. Please consult the following to help address any questions or concerns (always remember to ask in advance!):

<https://history.rutgers.edu/52-academics/undergraduate-program/109-statement-on-plagiarism>

<https://wp.rutgers.edu/academics/undergraduate/plagiarism>

Disability

All photographs, images, and videos shown in class will be paired with verbal descriptions. All videos and films will be shown with captions. All assigned texts on the Sakai site have also been made screen reader compatible and will be available in large print.

Students with disabilities should reach out to discuss any additional accommodations that they will need. Students will also need to register with the Office of Disability Services (ODS) at 848-445- 6800 (or by email at dsoffice@echo.rutgers.edu) located in Lucy Stone Hall, Suite A145 on the Livingston Campus.

Documentation is required in advance from ODS before accommodations can be made for exams. Visit the internet address of this office at <https://ods.rutgers.edu/> for more information



Image Description: 504 sit-in protest, seven disabled protestors in wheelchairs, protesting at the 504 sit-in, holding sign that says "Injustice Anywhere is a Threat to Justice Everywhere - Martin Luther King Jr."

Student Wellness Resources

- [Rutgers Universitywide COVID-19 Information](#)
- [Just In Case Web App](#)
- Access helpful mental health information and resources for yourself or a friend in a mental health crisis on your smartphone or tablet and easily contact CAPS or RUPD.
- [Counseling, ADAP & Psychiatric Services \(CAPS\)](#) (848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901 - CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professionals within Rutgers Health Services to support students' efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.
- [Violence Prevention & Victim Assistance \(VPVA\)](#) (848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 - The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.
- [Scarlet Listeners](#) (732) 247-5555 / Free and confidential peer counseling and referral hotline, providing a comforting and supportive safe space.
- [Report a Concern](#)
- Basic Needs Security: Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to contact the Dean of Students for support. Also, if you are comfortable doing so, please notify the professor so that they can help however they can and connect you with campus resources.
- [Office of the Dean of Students](#), 88 College Avenue New Brunswick, NJ 08901, 848-932-2300, deanofstudents@echo.rutgers.edu
- [Rutgers Student Food Pantry](#), 39 Union Street New Brunswick, NJ 08901, 848-932-5500, ruoffcampus@echo.rutgers.edu

Module 1 (June 28-July 4): Introduction/Early American Foodways and Dispossession

Topics Covered:

- Defining Technology and Nature, Introduction to the Course
- Recovering Manahatta, Fish Weirs, Oyster Bays and Dispossession
- The Slave Trade and Botanical Legacies

Readings:

- Langdon Winner "Do Artifacts Have Politics?" In *The Whale and the Reactor* (Chicago University Press, 1986), 19-39
- Leo Marx "The Idea of Nature in America," *Daedalus* (Spring 2008): 8-21
- Judith Carney and Richard Nicholas Rosomoff, *In the Shadow of Slavery: Africa's Botanical Legacy* (Berkeley: University of California Press, 2009), chapters 1 and 4
- [The Public History Project, "Indigenous Foodways" Series](#)
- Explore: [Weilikia Project](#)

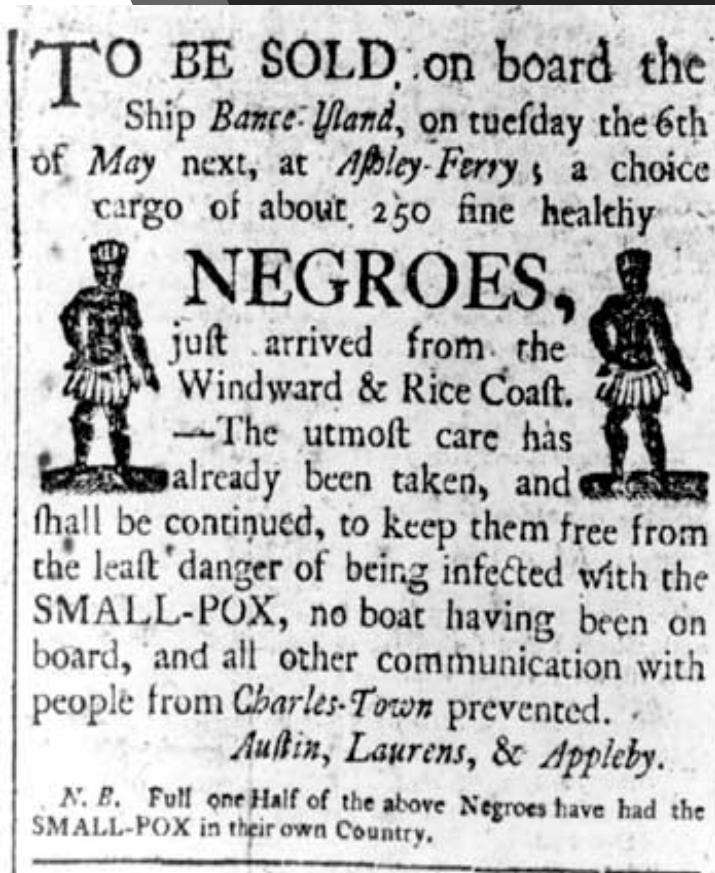


Image Description: Undated announcement from unknown source. Text reads: "To be sold on board the ship Bance Uland, on tuesday the 6th of May next, at Affley Ferry, a choice cargo of about 250 fine healthy Negroes, just arrived from the Windward and Rice Coast. — The utmost care has already been taken, and shall be continued, to keep them free from the least danger of being infected with Small-Pox, no boat having been on board, and all other communication with people from Charlest-town prevented. Aulkins, Laurens & Appleby. N.B. Full one half of the above Negroes had the small-pox in their own country."

Module 2 (July 5-July 11): Nature and Capital

Topics Covered

- Work and Resistance in the Plantation
- From Bison to Cattle: Colonizing the American Plains
- Lighting America: Labor, Commodification, and Myths of
of
- American Exceptionalism

Readings:

- Stephanie M. H. Camp, *Closer to Freedom: Enslaved Women and Everyday Resistance* (Chapel Hill: UNC Press, 2004), chapter 1
- Jeremy Zallen, *American Lucifers: The Dark History of Artificial Light, 1750-1865* (Chapel Hill: UNC Press, 2019), chapter TBD
- Explore “[Mapping Slavery in Detroit](#)”

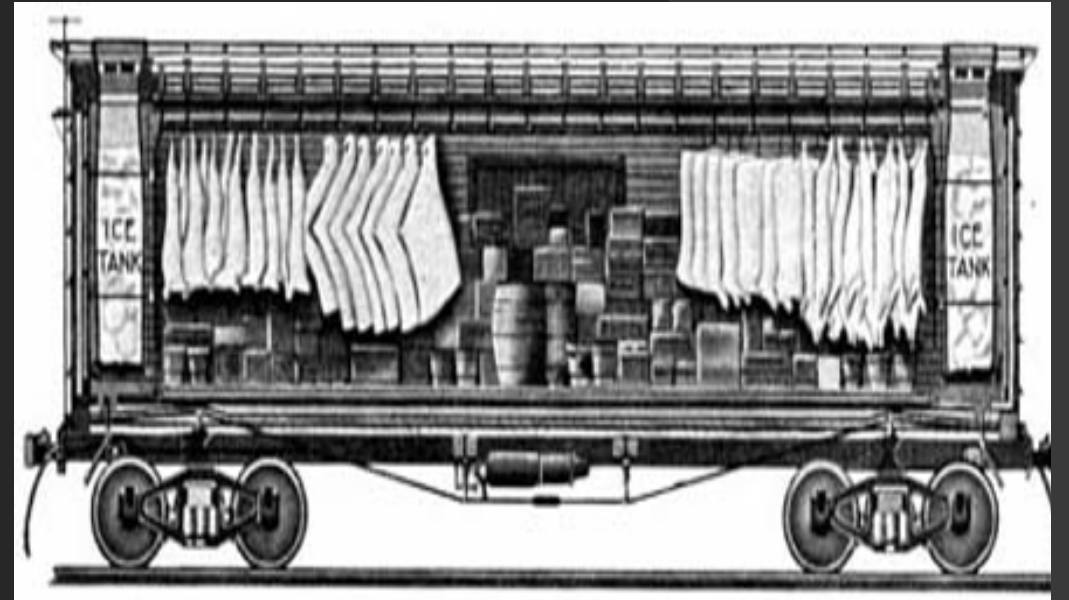


Image Description: 19th century railcar, showing circulation of cold air and hanging carcasses of pigs and cows.

Module 3 (July 12-July 18): Infrastructures of Empire



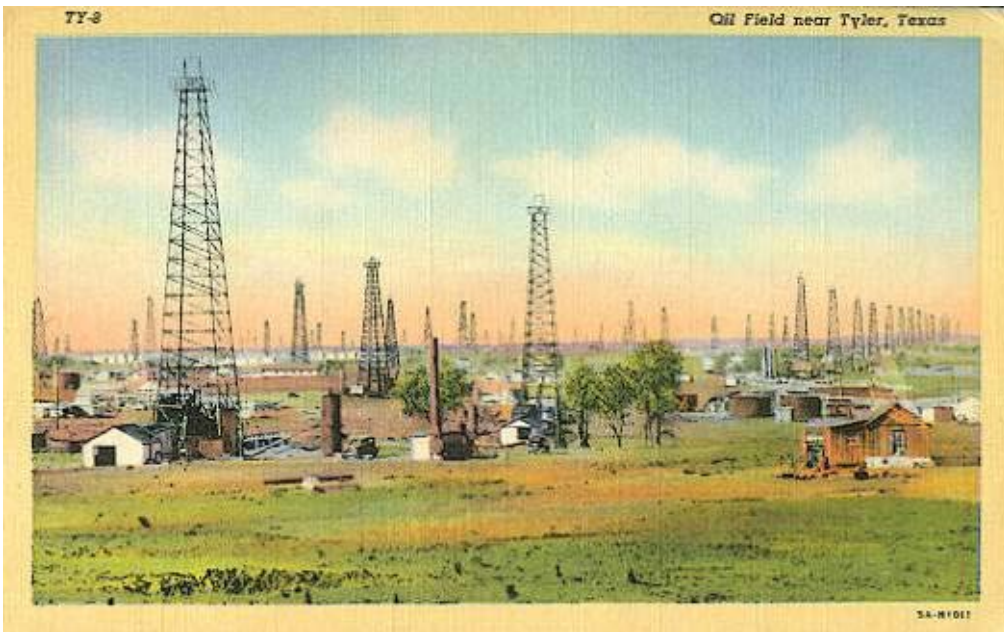
Image Description: Two white border patrol agents holding guns and standing in water confront three Mexican nationals, who are standing in worn down canoe.

Topics Covered:

- Railroads, Rivers, and Westward Expansion
- Engineering Urban Space
- Making Borderlands

Readings:

- Rachel St. John, “Divided Ranges: Trans-border Ranches and the Creation of National Space along the Western Mexican-U.S. Border,” in *Bridging National Borders in North America*, Benjamin Johnson and Andrew Graybill, editors (Durham: Duke University Press, 2010)
- Thomas Andrews, “‘Made by Toile’? Tourism, Labor, and the Construction of the Colorado Landscape” *Journal of American History*, 92.3 (2005): 837-863.
- Coll Thrush, “City of the Changers: Indigenous People and the Transformation of Seattle’s Watersheds,” *Pacific Historical Review*, Volume 75, No. 1 (February 2006), pp. 89-117
- *Watch: “Chinatown”* (1974)



Top Image description: postcard from Tyler, Texas, with farm setting in the foreground and large number of oil drill sites fading into the background.



Bottom Image description: Advertisement for Crisco. White woman shown in top left corner. Center of image text reads: "fry with the one and only Crisco It's Digestible!"

Module 4 (July 19-July 25): Industrialization and Abundance in the Post-World War II Period

Topics Covered:

- Technologies of Confinement and the Rise of Mass Incarceration
- Nuclear Testing and Cold War Politics
- The Gospel of Oil: The Material Legacies of American Consumerism

Readings:

- Ryan Hatch, "Billions Served: Prison Food Regimes, Nutritional Punishment, and Gastronomical Resistance," in *Captivating Technologies: Race, Carceral Technoscience, and Liberatory Imagination in Everyday Life*, edited by Ruha Benjamin (Durham: Duke University Press, 2019)
- Kate Brown, "[A People's Truth](#)," *Aeon* (2012)
- Darren Dochuk, "Blessed by Oil, Cursed with Crude: God and Black Gold in the American Southwest," *Journal of American History* (2012), pp. 51-61.
- Andrew Needham, "Powering Modern America," in *Why You Can't Teach United States History without American Indians*, ed. Susan Sleeper-Smith et al. (UNC Press, 2015)
- Natasha Zaretsky, *Radiation Nation: Three Mile Island and the Political Transformation of the 1970s* (New York: Columbia University Press, 2018), chapter TBD
- Explore: [Prison Ecology Project](#)

Module 5 (July 26-August 1): Forms of Environmental Activism

Topics Covered:

- United Farmworkers Movement and Confronting the Slow Violence of Speeding Up America's Foodways
- The Politics of Public Housing and the Origins of the Environmental Justice Movement
- Earth Day and Fractures within the American Environmental Movement

Readings:

- Explore: [“This Lead is Killing Us”](#)
- Monica Perales, “Fighting to Stay in Smelertown: Lead Contamination and Environmental Justice in a Mexican American Community” *Western Historical Quarterly*, Spring 2008
- Linda Nash, “The Fruits of Ill-Health: Pesticides and Worker's Bodies in Post-World War II California,” *Osiris* Vol. 19 (2004): 203-19.
- Finis Dunaway, “Gas Masks, Pogo, and the Ecological Indian: Earth Day and the Visual Politics of American Environmentalism,” *American Quarterly* 60 (March 2008): 67-99
- Watch: [“PCB Protests in Warren County”](#) (1982)




Image description: From the first Earth Day celebration in 1970. Black and white photograph of young white male wearing vintage gas mask, stretching to smell magnolias.

Module 6 (August 2-August 8): Climates of Inequality

Topics Covered:

- Modeling Climate Change
- “Natural” Disasters: From Katrina to Flint
- Climate Activism in the 21st Century

Readings:

- Jesmyn Ward, *Sing, Unburied, Sing: A Novel*, selections
- Mary Anaise Heglar, “[I Work in the Environmental Movement. I Don’t Care if you Recycle](#)” *Vox* (2019)
- Watch: “[Here’s To Flint](#)” (2016),
- Watch: Paul Edwards, “[Modeling Wicked Problems](#),” *The Anthropocene Campus*, Nov. 2014:
- Explore: “[Climates of Inequality](#)”

Image description: plastic water bottle containing darkened water from Flint, Michigan resident tap. Bottle is labeled with the date 1/15/15

