

Accidents and Disasters in the U.S. and the World
512:235
Monday/Thursday 11:30-12:50
Frelinghuysen Hall B6, College Ave. Campus

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Course Description

This course examines the histories of accidents and disasters in the United States and the world from the 17th to the 21st centuries, with particular emphasis on the 19th and 20th centuries. Although accidents and disasters are often understood as isolated, rare events, catastrophic events have been continuously important to the history of the United States, both at home and abroad, for the past four centuries. Through ongoing efforts to anticipate unforeseen dangers, develop new tools for risk management, build infrastructures for relief, expand the capacity of the state for disaster response, and remember victims, accidents and disasters have become increasingly central to everyday life in the United States.

The course will revolve around four sets of questions:

1.) To what extent are “natural” disasters, like hurricanes and floods, in fact “unnatural”—

shaped by human decisions about markets and economic growth, science and technology, and governance? Conversely, to what extent are the failures of human-built technological systems like nuclear reactors and electrical grids beyond human control?

2.) How can historians understand singular events—like the Great Chicago Fire (1871) and the San Francisco Earthquake (1906), and high-profile accidents like Chernobyl (1986) and the Space Shuttle *Challenger* explosion (1986)—in the broader contexts of political economy, state-building, capitalism, technoscience, society and culture, and media? How do disasters unfold in different timeframes, whether sudden and singular events like the Galveston Hurricane (1900) or long-term, infrastructural, “slow” disasters, like poverty, disease, and climate change? How do particular narratives of accidents and disasters become a usable past for policymakers, business interests, environmentalists, and other social groups?

3.) How has the social experience of disaster been historically differentiated along lines of race, class, gender, and region? How have disasters been imagined as spectacle in media and popular culture, and how has the lived experience of disaster preparedness become routinized in everyday life?

4.) Accidents and disasters obviously bring death and destruction, but how have they also led to moments of creation and production, including new forms of governance, new opportunities for profit-making, artistic and cultural responses, and community-building? What is the historical relationship between disaster response and state-building within the United States and around the world? How have accidents and disasters produced new forms of knowledge and expertise in prediction, risk management, emergency preparedness, and public policy?

To study accidents and disasters, we will draw on topics and methods from environmental history, the history of science and technology, and the history of capitalism, as well as political, social, and cultural history. The course will explore the material and ecological dimensions of disaster alongside shifting cultural meanings of catastrophe.

Course Format

This is a combined lecture/discussion course with emphasis on discussion of primary sources. Each class session will combine a short lecture with discussion of the assigned primary sources, which will include documents, maps, visual art, film, and television clips.

SAS Core Learning Goals for Historical Analysis (HST)

- H. Understand the bases & development of human and societal endeavors across time and place.
- L. Employ historical reasoning to study human endeavors

Course Learning Goals

- Analyze the relationship between what have traditionally been considered “natural disasters” and human-induced accidents and disasters

- Analyze changing ideas and scientific knowledge about accidents and disasters from colonial America to the twenty-first century
- Analyze how experiences of accidents and disasters have historically been shaped by race, class, and gender
- Analyze the expanding role of the state and experts in disaster management from the nineteenth to the twentieth centuries
- Analyze (and differentiate between) primary and secondary sources
- Write analytically about multiple primary sources

Required Books

Arwen P. Mohun, *Risk: Negotiating Safety in American Society* (Johns Hopkins University Press, 2013), hardcover (used copies available for \$25 on Amazon.com). ISBN: 9781421407906

Additional readings will be available on Sakai.

Major Assignments

Paper #1 (15% of course grade): 3-page analysis of primary sources on late-19th-c. weather insurance and accident insurance

Midterm exam (20% of course grade)

Paper #2 (25% of course grade): 5-page comparative analysis of primary sources on the Triangle Fire and Love Canal

Final exam (20% of course grade)

Class participation/citizenship (20% of course grade)

Course Policies

Attendance Policy

Students are expected to attend all sessions and to be active and thoughtful participants in class discussion. **More than three (3) unexcused absences (i.e., other than a documented illness, documented emergency, religious observance, or university-approved absence) will have an adverse effect on your grade. For each unexcused absence beyond the 3 allowed, your final course grade will be lowered by 2 percentage points.** For example, if you accumulate 5 unexcused absences during the semester and have a grade of 83%, your grade will be lowered to 79%. Please note that an excused absence means that you provide a note from a doctor, dean, or coach that explains your absence. **All absences, whether excused or unexcused, should be entered into the Rutgers University absence reporting website <https://sims.rutgers.edu/ssra/>, where you will indicate the date and reason for your absence.** I will receive an automatic email from this system, so there is no need to send me a separate email regarding your attendance.

Citizenship

The Department of History's "Policy on Mutual Responsibilities and Classroom Etiquette" states, "Our commitments to a strong learning community are expressed in many ways. Respectful professors convey their commitment to the discipline of history and

their desire to share its delights and challenges. They are well prepared for class, provide students with clear goals and expectations, listen carefully to student questions and comments, and conscientiously evaluate their students' work. Respectful students bring a strong work ethic to the history courses that they select. They expect to attend the scheduled classes, to be on time, to be prepared for class, and to be attentive during class. A shared respect for the discipline of history and for one another as teachers and students of history is essential to the academic integrity of our program. We must all do our part to maintain an environment of openness and civility that encourages and honors the intellectual achievement represented by the discipline of history."

<http://history.rutgers.edu/undergraduate/academic-policies/52-academics/undergraduate-program/108-policy-on-mutual-responsibilities-and-classroom-etiquette> (Accessed January 13, 2016.)

Each of you is a valuable member of our intellectual community this semester, and I trust that you will conduct yourselves accordingly. My goal is that our classroom will be a space for thoughtful, sustained, and respectful engagement with the course material and with each other. In order to achieve that goal, we will need to give each other and the material our undivided attention, which means that texting and online activity unrelated to the class are not permitted for any reason. **If I see you using a mobile phone during class, you will be marked "absent" for that day. Laptops and tablets may be used for note-taking and for accessing the assigned reading only.** I trust that you will make your best effort to contribute to our intellectual collaboration by arriving to class on time, participating in class discussions and activities, not distracting yourself or others during class, and not leaving class early (unless you have explained to me in advance why you must leave early). **Twenty percent** of your course grade will be based on class participation and citizenship.

Assignments

In addition to regular attendance and participation, students will be required to write a 3-page analytical essay, write a 5-page analytical essay, and take a midterm exam and a final exam. The reading assignments should be completed for the date on which they are listed. **You will need to bring your readings with you to class in hard copy or digital format as we will often refer to specific passages during discussion.**

Late submissions

Please note that late paper submissions will be penalized by half a letter grade (e.g., from B+ to B) for each day they are late, unless you have obtained a letter from a doctor or a dean explaining why you were unable to complete your work on time.

Grading scale

Individual assignments will be graded according to the following scale:
A (93-95%), A- (90-92%), B+ (87-89%), B (83-86%), B- (80-82%), C+ (77-79%), C (73-75%), C- (70-72%), D+ (67-69%), D (63-66%), D- (60-62%), F (59% and below).

Final course grades will conform to University policy that uses "+" but not "-" grades: A (90% and above), B+ (85-89%), B (80-84%), C+ (75-79%), C (70-74%), D (60-69%), F (59% and below).

Your grades

Our Sakai grade book will be updated regularly throughout the semester, so please make sure to check your grades so that you know where you stand. If you would like to discuss your grades at any point, I am always happy to meet with you during office hours (but I do not discuss grades over email). There are no extra credit assignments in this course, and I do not give out extra points at the end of the semester.

Academic Integrity

The foundation of this course and any scholarly endeavor is academic integrity. I fully expect that all students will adhere to principles of academic integrity in their work. **You are responsible for understanding the Rutgers policies regarding academic integrity, as outlined at <http://academicintegrity.rutgers.edu>. Ignorance of these policies or the consequences for violations is not an acceptable excuse.**

All written work must be a student's own original work. Any and all references to other sources within your own paper must be properly cited according to the bibliographic conventions of the Chicago Manual of Style, which is available at the Alexander Library and online at the Purdue Online Writing Lab:

<https://owl.english.purdue.edu/owl/resource/717/01/>

If you have any questions about quoting, paraphrasing, or referring to the work of others, please ask! It is better to be safe than sorry, better to have too many citations than not enough and thus run the risk of unintentional plagiarism.

Any and all violations of academic integrity in this course will result in the formal consequences and disciplinary action that are outlined in the Rutgers policy on academic integrity. I have a zero-tolerance policy for academic dishonesty and refer all violations directly to the Office of Student Conduct.

Contacting the Professor

I am available during office hours each week, and I can also have quick conversations before or after class. I check email regularly and will respond within 24 hours. Please contact me with any questions or concerns as soon as they arise. I am always happy to help students with the course material and with their writing.

Students with Disabilities

Rutgers, the State University of New Jersey abides by the Americans with Disabilities Act of 1990, the Americans with Disabilities Act Amendments (ADAA) of 2008, and Sections 504 and 508, which mandate reasonable accommodations be provided for qualified students with disabilities and accessibility of online information. If you have a disability and may require some type of instructional and/or examination accommodation, please contact me during the first week of the semester so that we can arrange accommodations. If you have not already done so, you will need to register with the Office of Disability Services, Lucy Stone Hall, Livingston Campus, 54 Joyce Kilmer Ave., Suite A145. Phone: 848.445.6800 Online: <https://ods.rutgers.edu/>

Course Schedule

All assigned readings (other than Mohun's book *Risk*) will be posted on our course Sakai site.

Week 1

Introduction and Course Overview

Thinking Historically About Accidents and Disasters

- Charles Perrow, *Normal Accidents: Living with High-Risk Technologies* (Princeton University Press, 1999 [1984]), pp. 2-12
- Greg Bankoff, "No Such Thing as Natural Disasters," *Harvard International Review*, August 23, 2010, <http://hir.harvard.edu/no-such-thing-as-natural-disasters/>
- Scott Gabriel Knowles, "Learning From Disaster? The History of Technology and the Future of Disaster Research," *Technology and Culture* 55, no. 4 (2014): 773-784 <http://muse.jhu.edu.proxy.libraries.rutgers.edu/article/562831>
- Mohun, *Risk*, introduction

Week 2: Encountering Disaster in the New World

Narrating Epidemics

- Miguel León-Portilla, *Broken Spears: The Aztec Account of the Conquest of Mexico* (Beacon Press, 2006), excerpts on plague
- Mohun, *Risk*, chap. 2 ("The Uncertainties of Disease")

The Ways of Providence and the "Blessings of Disaster"

- Increase Mather, *Remarkable Providences: Illustrative of the Earlier Days of American Colonization* (Reeves & Turner, 1890 [1684]), chapter 10 ("Of Remarkable Tempests, etc., in New-England") <https://archive.org/details/remarkableprovi01mathgoog>
- Mohun, *Risk*, chap. 1 ("Fire Is Everybody's Problem")

Week 3: Knowing Natural Hazards in Colonial and Early America

Hurricanes and Empire in the Atlantic World

- Captain Langford's Observations of his own Experience upon Hurricanes, and their Prognosticks," *Philosophical Transactions of the Royal Society* 20 (1698): 407-16
- Excerpts from R. Bohun, *A Discourse Concerning the Origine and Properties of Wind, with an Historicall Accounts of Hurricanes, and Other Tempestuous Winds* (Oxford: W. Hall, 1671), <https://catalog.hathitrust.org/Record/010824485>

The New Madrid Earthquakes (1811-1812) and Disaster Science

- Selected eyewitness accounts of New Madrid Earthquakes from the University of Memphis Center for Earthquake Research and Information

<http://www.memphis.edu/cei/compendium/eyewitness.php>

Week 4: The New Industrial-Accident Society

Industrial Accidents and the Pricing of Injury

- Mark Twain, *Life on the Mississippi* (Harper & Brothers, 1901 [1874]), chap. 37 (“A Terrible Disaster”)
- Mohun, *Risk*, chap. 5 (“Railroads, or Why Risk in a System is Different”)

Constructing Narratives of the Great Chicago Fire (1871)

- “Account by an Eye-Witness,” *Harper’s Weekly*, October 28, 1871
https://www.gilderlehrman.org/sites/default/files/inline-pdfs/01733_13.pdf
- Excerpts from Elias Colbert and Everett Chamberlin, *Chicago and the Great Conflagration* (Cincinnati and New York: C. F. Vent, 1872),
<https://archive.org/details/chicagogreatconf00colb>

Week 5: Predicting Extreme Weather

Weather Prophets and the Blizzard of 1888 [PAPER #1 DUE]

- Primary source collection: official reports from the U.S. Army Signal Service, newspaper accounts of private weather forecaster Horace Johnson, newspaper coverage of the blizzard

American and Cuban Meteorological Infrastructures and the Galveston Hurricane (1900)

- Isaac Monroe Cline, *Storms, Floods, and Sunshine* (1945), chap. XVI (“Cyclone of September 5-10, 1900—The Galveston Hurricane”)
<https://books.google.com/books?isbn=1455612537>

Week 6: The Profits of Disaster

Creative Destruction and the San Francisco Earthquake and Fire (1906)

- Excerpts from Andrew C. Lawson, *The California Earthquake of April 18, 1906: Report of the State Earthquake Investigation Commission*, Vol. 1, Part 1 (Washington, DC: Carnegie Institution of Washington, 1906)

Intimacies of Disaster

- Primary sources from Malcolm E. Barker, ed. *Three Fearful Days: San Francisco Memoirs of the 1906 Earthquake and Fire* (San Francisco: Londonborn Publications, 1998)

Week 7: The Allure of Disaster

- A. Berges, “Proposed Apparatus for a Fall of 1,000 Feet,” *Scientific American*, February 21, 1891, p. 114
- Frederic Thompson, “Amusing the Million,” *Everybody’s Magazine* 19 (September 1908): 378-87

- Edward F. Tilyou, "Human Nature with the Brakes Off," *American Magazine* 94 (July 1922): 18-21
- "Dangerous Entertainment," *Literary Digest*, July 29, 1922, p. 23
- Mohun, *Risk*, chap. 10 ("Risk as Entertainment: Amusement Parks")

MIDTERM EXAM

Week 8: Disaster Expertise in the Progressive Era

Investigating and Reforming the Factory

- Film: *Triangle Fire (American Experience)*, 60 min.
- Primary sources from <http://trianglefire.ilr.cornell.edu/primary/index.html>
- Mohun, *Risk*, chap. 6 ("The Professionalization of Safety")

American Humanitarianism during World War I

- *America's Obligations in Belgian Relief: Address of Herbert C. Hoover, Chairman of the Commission for Relief in Belgium Before the Chamber of Commerce of the State of New York, February 1, 1917* <https://catalog.hathitrust.org/Record/006069711>
- Julia F. Irwin, "The Disaster of War: American Understandings of Catastrophe, Conflict, and Relief," *First World War Studies* 5 (2014): 17-28

Week 9: Inequalities of Disaster Relief

Engineering and Flood Control in the Boston Molasses Disaster (1919) and the Mississippi Flood (1927)

- Burtis S. Brown, "Details of the Failure of a 90-Foot Molasses Tank," *Engineering News-Record* 82, no. 20 (May 15, 1919), 974-76
<https://archive.org/stream/engineeringnewsr1919brow/scientificameric1919unse#page/974/mode/2up>
- Richard M. Mizelle, Jr., "Black Levee Camp Workers, the NAACP, and the Mississippi Flood Control Project, 1927-1933," *Journal of African American History*, 98, no.4 (2013): 511-530

Disaster Relief and the New Deal Order

- Michelle Landis Dauber, *The Sympathetic State: Disaster Relief and the Origins of the American Welfare State* (University of Chicago Press, 2013), chap. 4 ("Crafting the Depression")
- Film: Pare Lorentz, *The River* (1938), 31 min.

Week 10: The Rise of the Disaster-Security State

Civil Defense

- Wilbur J. Cohen and Evelyn F. Boyer, "Federal Civil Defense Act of 1950: Summary and Legislative History," *Social Security Bulletin*, April 1951, pp. 11-16
<https://www.ssa.gov/policy/docs/ssb/v14n4/v14n4p11.pdf>

- National Security Resources Board, *Survival Under Atomic Attack* (U.S. Government Printing Office, 1950)
<https://www.ora.gov/ptp/Library/cdv/Survival%20Under%20Atomic%20Attack.pdf>
- Film: *Duck and Cover* (1951), 9 min.

Cold War Disaster Relief and Research

- Federal Disaster Relief Act (1950)
- Julia F. Irwin, "Raging Rivers and Propaganda Weevils: Transnational Disaster Relief, Cold War Politics, and the 1954 Danube and Elbe Floods," *Diplomatic History* (2015): 893-921

Week 11: Nuclear Disasters, Fast and Slow

Imagining Nuclear Annihilation

- Film clips: *The Day After* (1983)
- Mark Monmonier, *Cartographies of Danger: Mapping Hazards in America* (University of Chicago Press, 1997), chap. 10 ("Nuclear Nightmares")

The Technopolitics of Meltdown

- The KGB's Report on Explosion and Fire at Chernobyl Nuclear Power Plant, April 26, 1986, Wilson Center Digital Archive, <http://digitalarchive.wilsoncenter.org/document/121645>
- KGB's Report on Options of Chernobyl Nuclear Disaster Elimination, May 4, 1986, Wilson Center Digital Archive, <http://digitalarchive.wilsoncenter.org/document/121647>
- KGB's Report on Operational Disorder in Organizing Activities Aimed at Chernobyl Nuclear Disaster Elimination, Wilson Center Digital Archive, <http://digitalarchive.wilsoncenter.org/document/121649>
- Mikhail Gorbachev, Televised address on the Chernobyl Accident, Moscow, May 15, 1986
- William A. Dorman and Daniel Hirsch, "The U.S. Media's Slant," *Bulletin of the Atomic Scientists* 42, no. 7 (1986): 54-56

Week 12: Consumer Politics & Environmental Activism

Car Crashes and "Body Rights"

- Ralph Nader, *Unsafe at Any Speed: The Designed-In Dangers of the American Automobile* (1965), preface
- Film: *The Corvair in Action* (1960), 6 min. <https://archive.org/details/Corvair1960>
- Mohun, *Risk*, chaps. 8, 11 ("Negotiating Automobile Risk," "Consumer Product Safety")

Environmental Racism and Environmental Justice

- National Library of Medicine, “Polychlorinated Biphenyls (PCBx),” *ToxTown*, http://www.toxtown.nlm.nih.gov/text_version/chemicals.php?id=25
- “Principles of Environmental Justice” from the First National People of Color Environmental Leadership Summit, October 24-27, 1991, Washington DC <http://www.ejnet.org/ej/principles.html>
- Robert D. Bullard, “Anatomy of Environmental Racism and the Environmental Justice Movement,” in *Confronting Environmental Racism: Voices from the Grassroots*, ed. Robert D. Bullard (Boston: South End Press, 1993), 15-40

Week 13: NASA, FEMA, and Federal Disaster Management

Systems Thinking and the Risks of Space Flight

- Ronald Reagan, Address on the Space Shuttle *Challenger*, January 28, 1986 <http://millercenter.org/president/reagan/speeches/speech-3413>
- “An Oral History of the Space Shuttle *Challenger* Disaster,” *Popular Mechanics*, January 28, 2016, <http://www.popularmechanics.com/space/a18616/an-oral-history-of-the-space-shuttle-challenger-disaster/>
- Excerpts from *Report to the President by the Presidential Commission on the Space Shuttle Challenger Accident* (June 1986), https://spaceflight.nasa.gov/outreach/SignificantIncidents/assets/rogers_commission_report.pdf

Terrorism as Disaster

- Executive Summary and Introduction from Federal Emergency Management Agency, *World Trade Center Building Performance Study: Data Collection, Preliminary Observations, and Recommendations* (Washington, DC: Federal Insurance and Mitigation Administration, 2002), https://www.fema.gov/media-library-data/20130726-1512-20490-7075/403_execsum.pdf
https://www.fema.gov/media-library-data/20130726-1512-20490-1698/403_ch1.pdf

Week 14: Unnatural Disasters in the Twenty-First Century

Infrastructure, Racialized Space, and Hurricane Katrina (2005)

- Mia Bay, “Invisible Tethers: Transportation and Discrimination in the Age of Katrina,” in *Katrina’s Imprint: Race and Vulnerability in America*, ed. Keith Wiloo, Karen M. O’Neill, Jeffrey Dowd, and Roland Anglin (Rutgers University Press, 2010), pp. 21-33
- John A. Powell, Hasan Kwame Jeffries, Daniel W. Newhart, and Eric Stiens, “Towards a Transformative View of Race: The Crisis and Opportunity of Katrina,” in *There is No Such Thing as a Natural Disaster: Race, Class, and Hurricane Katrina*, ed. Chester Hartman and Gregory D. Squires (Routledge, 2006), pp. 59-84

Climate Change as Slow Disaster [PAPER #2 DUE]

- IPCC, *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* http://www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_FINAL_SPM.pdf
- Film: *The Island President* (2011)

Week 15: Conclusions

- Naomi Klein, "Disaster Capitalism: The New Economy of Catastrophe," *Harper's Magazine*, October 2007
- Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (Harvard University Press, 2013), pp. 1-14
- Charles Perrow, *The Next Catastrophe: Reducing Our Vulnerabilities to Natural, Industrial, and Terrorist Disasters* (Princeton University Press, 2011 [2007]), preface to the paperback edition
- Lee Clarke, *Worst Cases: Terror and Catastrophe in the Popular Imagination* (University of Chicago Press, 2006), chap. 6 ("Living and Dying in Worst Case Worlds")

FINAL EXAM
DATE/TIME TBA