

## **The Nuclear Age (17780)**

HIST 33205

Fall 2023

Time: Tuesday and Thursday, 3pm–4:15pm

Location: Wilmeth Active Learning Center B091

Instructor: Austin R. Cooper, PhD

Office hours: UNIV 311, Tuesday and Thursday, 1:30pm–2:30pm

[cooperar@purdue.edu](mailto:cooperar@purdue.edu)

How did the invention of nuclear weapons and their use as an act of war in 1945 change military strategy, international diplomacy, and world politics? This course surveys historical efforts to understand and to navigate these changes at national, regional, and global scales. At the same time, it examines the development of nuclear energy and its complex relationship with nuclear weapons. How have policymakers weighed the benefits and risks of this form of electricity generation? How do these trade-offs look today facing climate change and nuclear proliferation concerns? The course offers a global retrospective of the nuclear age and its uneven impacts from North America and Europe to Asia and Africa. Topics include histories of fission research, radiation exposure, the Cold War and its intersections with decolonization struggles, nuclear deterrence, nonproliferation negotiations, accidents and close-calls, and disarmament efforts.

Students will gain familiarity with:

1. Historical and policy debates surrounding nuclear technologies, including military and energy applications;
2. Recent interdisciplinary scholarship and classic texts on the nuclear age;
3. Use of primary sources for historical research and historical writing;
4. Formulation of policy-relevant arguments in response to paper prompts and exam questions.

### **Required Texts**

1. Masuji Ibuse, *Black Rain*, trans. John Bester (Tokyo: Kodansha, 2012 [1969]).

All other texts available using the Brightspace Library Reading List tool.

### **Assignments and Weighting**

1. Response paper (500 words), on Ibuse's *Black Rain*, due 2pm August 31, 10% of final grade
2. Quiz, in class using Blue Books, September 14, 10%
3. Midterm exam, in class using Blue Books, October 12, 20%
4. Primary-source-based papers (1,000 words), each 20%
  - Topic: nonproliferation, due midnight November 3
  - Topic: disarmament, due midnight December 1
5. Final exam (in person using Blue Books, December 11–16), 20%

Unless done in class or otherwise in person, assignments are to be submitted using Brightspace.

Remember to bring to class on September 14 and October 12, and to the final exam (December 11–16), a Blue Book available for purchase at University Bookstore (360 W. State St.) or Follett's Purdue West Bookstore (1265 W. State St.).

## **Grading Scale**

A+: exceptional work

A: 93 or higher

A-: 90-92

B+: 87-89

B: 83-86

B-: 80-82

C+: 76-79

C: 70-75

D: 66-69

F: 65 or lower

## **Attendance**

Attendance is essential to success in this course. The course readings and lectures complement each other but are not interchangeable. Exams will almost certainly cover topics and questions that we discuss extensively in class but that the readings address only briefly, if at all.

This course follows the University Academic Regulations regarding class attendance, which state that students are expected to be present for every meeting of the classes in which they are enrolled. Students should request notes from their peers in the event of an absence. Please do not come to class if you are feeling ill.

## **Late Work**

Without written authorization from the instructor, student work forfeits the equivalent of one full letter grade (e.g., A work automatically becomes B work) for each day it is late. Work submitted more than 4 days late without this written authorization will receive a failing grade and will not otherwise be graded.

Students should request extensions in writing at least 72 hours before the assignment deadline no matter the circumstances. When conflicts can be anticipated, such as for many University-sponsored activities and religious observations, you should inform me of the situation as far in advance as possible. For cases that fall under excused absence regulations, you or your representative should contact or go to the Office of the Dean of Students (ODOS) website to complete appropriate forms for instructor notification. Under academic regulations, excused absences may be granted by ODOS for cases of grief/bereavement, military service, jury duty, parenting leave, or emergent medical care. The processes are detailed, so plan ahead.

For unanticipated or emergency circumstances when advance notification is not possible, contact me as soon as possible by email. These emergencies may require documentation. Extensions not covered by the excused absence or emergency policies will be granted at the instructor's discretion.

Regarding make-up quizzes and exams, or any other in-class assignment, please contact me by email as far in advance as possible.

## **Academic Integrity**

I encourage students to study together and otherwise discuss the course materials, but all written assignments should reflect only each student's own work that they have completed independently. Attempts to pass off another's words as your own – be it on an in-class exam or a course paper written outside class time – will carry harsh penalties. Violations of academic integrity in this course will be addressed by the instructor and referred to the Office of Student Rights and Responsibilities (OSRR) for review at the university level. Any violation of course policies as it relates to academic integrity will result minimally in a failing or zero grade for that particular assignment and at the instructor's discretion may result in a failing grade for the course. In addition, all incidents of academic misconduct will be forwarded to OSRR, where university penalties, including removal from the university, may be considered. The "University Regulations" handbook contains further information on dishonesty. Please make sure that you are familiar with Purdue's academic integrity policies, available on the Brightspace course site.

## **References and Citations**

Assignments for this class require citations complying with the Chicago Manual of Style Notes and Bibliography system. The Chicago Manual of Style (17<sup>th</sup> edition) is available online using the Purdue University Libraries site. The Purdue Online Writing Lab offers a brief overview of Chicago Style:

[https://owl.purdue.edu/owl/research\\_and\\_citation/chicago\\_manual\\_17th\\_edition/cmos\\_formatting\\_and\\_style\\_guide/chicago\\_manual\\_of\\_style\\_17th\\_edition.html](https://owl.purdue.edu/owl/research_and_citation/chicago_manual_17th_edition/cmos_formatting_and_style_guide/chicago_manual_of_style_17th_edition.html).

## **Recording Policy**

Course lectures and discussions may not be recorded using audio or video without written permission from the instructor.

## **Technology Policy**

I encourage students to consider dedicating a notebook to this course and taking notes by hand in it during class and while reading. Students may instead use their electronic devices for this purpose during class if preferred. Please do your very best to limit class-time uses of electronic devices to course purposes only. Other class-time uses of these devices distract not only you but also those around you. Please silence all ringers and other notifications during class.

## **Reading Instructions**

Please read each assigned text in advance of the paired class session (e.g., read Sime's "Politics of Forgetting" prior to class on August 24). Consider making brief notes about each assigned text. Perhaps summarize in a few phrases the main point, supporting claims, and key evidence.

## **Course Schedule**

Tuesday, August 22, 2023

Orientation, introductions, discussion of primary sources and secondary sources, Q&A

## Part 1: World War

Thursday, August 24, 2023

Fission Research

Ruth L. Sime, “The Politics of Forgetting: Otto Hahn and the German Nuclear-Fission Project in World War II,” *Phys. Perspect.* 14 (2012): 59–94. <https://doi.org/10.1007/s00016-011-0065-6>.

Tuesday, August 29, 2023

“The Decision”

J. Samuel Walker, “Recent Literature on Truman’s Atomic Bomb Decision: The Triumph of the Middle Ground?” In *America in the World: The Historiography of American Foreign Relations since 1941*, eds. Frank Costigliola and Michael J. Hogan, 2nd ed. (Cambridge, UK: Cambridge University Press, 2013), 83–104.

Thursday, August 31, 2023

Hiroshima

Ibuse, *Black Rain*

Tuesday, September 5, 2023

“International Control”

Shane J. Maddock, *Nuclear Apartheid: The Quest for American Atomic Supremacy from World War II to the Present* (Chapel Hill, NC: The University of North Carolina Press, 2010), Ch. 3.

## Part 2: Cold War

Thursday, September 7, 2023

Arms Race

David Holloway, “Racing toward Armageddon? Soviet Views of Strategic Nuclear War, 1955–1972,” in *The Age of Hiroshima*, ed. Michael D. Gordin and G. John Ikenberry (Princeton, NJ: Princeton University Press, 2020), 71–88.

Tuesday, September 12, 2023

Semipalatinsk

Magdalena E. Stawkowski, “‘I Am a Radioactive Mutant’: Emergent Biological Subjectivities at Kazakhstan’s Semipalatinsk Nuclear Test Site,” *American Ethnologist* 43, no. 1 (2016): 144–57.

Thursday, September 14, 2023

Making a Nuclear Alliance

J. Michael Legge, “Theater Nuclear Weapons and the NATO Strategy of Flexible Response,” *RAND* (April 1983): v–xiii, 1–16. (Feel free to read the rest of it, just for fun.)

Tuesday, September 19, 2023

Atoms for Peace

Gisela Mateos and Edna Suárez-Díaz, “Atoms for Peace in Latin America” (2016) <https://doi.org/10.1093/acrefore/9780199366439.013.317>

Thursday, September 21, 2023

“Too Cheap to Meter?”

Mar Rubio-Varas, “The Changing Economic Context Influencing Nuclear Decisions,” in *Engaging the Atom: The History of Nuclear Energy and Society in Europe from the 1950s to the Present*, ed. Arne Kaijser et al. (Morgantown, WV: West Virginia University Press, 2021), 52–80.

Part 3: “Nuclear Imperialism”

Tuesday, September 26, 2023

*Bravo* and the Lucky Dragon

Thomas Kunkle and Byron Ristvet, “Castle Bravo: Fifty Years of Legend and Lore: A Guide to Off-Site Radiation Exposures,” DTRA (2013), 48–140

<https://apps.dtic.mil/sti/pdfs/ADA572278.pdf>.

Thursday, September 28, 2023

The Indochina Crisis

Matthew Jones, *After Hiroshima: The United States, Race, and Nuclear Weapons in Asia, 1945–1965* (Cambridge, UK: Cambridge University Press, 2010), introduction and ch. 6.

Tuesday, October 3, 2023

The French Bomb, African Decolonization, and Black Civil Rights

Jean Allman, “Nuclear Imperialism and the Pan-African Struggle for Peace and Freedom: Ghana, 1959–1962,” *Souls* 10, no. 2 (June 2008): 83–102.

Thursday, October 5, 2023

African Uranium

Gabrielle Hecht, “An elemental force: Uranium production in Africa, and what it means to be nuclear,” *Bulletin of the Atomic Scientists* (2012).

Tuesday, October 10, 2023

October Break: No class

Thursday, October 12, 2023

Midterm exam

Part 4: Nonproliferation

Tuesday, October 17, 2023

The Chinese Bomb

William Burr and Jeffrey Richelson, “Whether to ‘Strangle the Baby in the Cradle’: The United States and the Chinese Nuclear Program 1960–1964,” *International Security* 25, no. 3 (Winter 2000/2001).

Thursday, October 19, 2023

Negotiating Nonproliferation

William Burr, “U.S. Secret Assistance to the French Nuclear Program, 1969-1975: From ‘Fourth Country’ to Strategic Partner,” <https://www.wilsoncenter.org/publication/us-secret-assistance-to-the-french-nuclear-program-1969-1975-fourth-country-to-strategic>.

Tuesday, October 24, 2023

International Institutions and India

Elisabeth Roehrllich, *Inspectors for Peace: A History of the International Atomic Energy Agency* (Baltimore: Johns Hopkins University Press, 2022), ch. 5–6.

Thursday, October 26, 2023

Cold War Germany with Prof. Will Gray

Reading TBA

Tuesday, October 31, 2023

Oil Shock

Marino Auffant, “Oil for Atoms: The 1970s Energy Crisis and Nuclear Proliferation in the Persian Gulf,” *Texas National Security Review* 5, no. 3 (2022): 59–82.

<https://tnsr.org/2022/05/oil-for-atoms-the-1970s-energy-crisis-and-nuclear-proliferation-in-the-persian-gulf/>.

Thursday, November 2, 2023

Preventative Strikes

Giordana Pulcini and Or Rabinowitz, “An Ounce of Prevention—A Pound of Cure? The Reagan Administration’s Nonproliferation Policy and the Osirak Raid,” *Journal of Cold War Studies* 23, no. 2 (2021): 4–40. [https://doi.org/10.1162/jcws\\_a\\_01007](https://doi.org/10.1162/jcws_a_01007).

#### Part 5: Mutually-assured Destruction

Tuesday, November 7, 2023

The Nuclear Revolution

Robert Jervis, *The Meaning of the Nuclear Revolution: Statecraft and the Prospect of Armageddon* (Ithaca, NY: Cornell University Press, 1989), ch. 1.

Thursday, November 9, 2023

Gambling with Armageddon

Benoît Pelopidas, “The Unbearable Lightness of Luck: Three Sources of Overconfidence in the Manageability of Nuclear Crises,” *European Journal of International Security* 2, no. 2 (2017): 240–62. doi:10.1017/eis.2017.6.

Tuesday, November 14, 2023

Damascus

No reading! Watch during class: Robert Kenner, *Command and Control* (2016)

\*\*\*Optional: Eric Schlosser, *Command and Control: Nuclear Weapons, the Damascus Accident, and the Illusion of Safety* (New York: Penguin, 2013).

\*\*\*Suggested: Start reviewing the Wilson Center documents (below) on South Africa to prepare for the next paper!

Thursday, November 16, 2023

Chernobyl

Sonia Schmid, “When safe enough is not good enough: Organizing safety at Chernobyl,”

*Bulletin of the Atomic Scientists* 67, no. 2 (2011): 19–29.

<https://doi.org/10.1177/0096340211399404>.

\*\*\*Suggested: Continue reviewing the Wilson Center documents (below) on South Africa to prepare for the next paper!

Part 6: Disarmament?

Tuesday, November 21, 2023

Apartheid’s Bomb

Review primary documents on South African nuclear history using the Wilson Center website:

<https://digitalarchive.wilsoncenter.org/topics/south-african-nuclear-history>.

Thursday, November 23, 2023

Thanksgiving Break: No class

Tuesday, November 28, 2023

Soviet Collapse

Mariana Budjeryn, “Non-Proliferation and State Succession: The Demise of the USSR and the Nuclear Aftermath in Belarus, Kazakhstan, and Ukraine,” *Journal of Cold War Studies* 24, no. 2 (2022): 46–94 [https://doi.org/10.1162/jcws\\_a\\_01077](https://doi.org/10.1162/jcws_a_01077).

Thursday, November 30, 2023

Cooperative Threat Reduction

Siegfried S. Hecker, “The story of Plutonium Mountain,” *Bulletin of the Atomic Scientists* (2013)

Tuesday, December 5, 2023

Pakistan, North Korea, Iran

David Albright and Corey Hinderstein, “Unraveling the A. Q. Khan and future proliferation networks,” *Washington Quarterly* 28, no. 2 (2005) 109–28. DOI: 10.1162/0163660053295176.

Thursday, December 7, 2023

Prohibition of Nuclear Weapons?

Rebecca Davis Gibbons, “The humanitarian turn in nuclear disarmament and the Treaty on the Prohibition of Nuclear Weapons,” *Nonproliferation Review* 25, no. 1–2 (2018): 11–36. DOI: 10.1080/10736700.2018.1486960.

December 11–16: Final Exam

### **Email Policy**

Outside of class or office hours, communicate with your instructor by email. Include the course title and state the reason for your email in the subject line (e.g., “HIST 33205 - question about essay”). Please make your message concise and clear. I will usually respond to your emails during the workday within 24 hours, except on the weekend.

### **Students with Disabilities**

Purdue University is committed to providing equal access and equal opportunity to university courses, activities, and programs for students with disabilities. As your instructor, I take this responsibility very seriously. Students with documented disabilities that substantially limit a major life activity, such as learning, walking, or seeing, may qualify for academic adjustments and/or services. If you have a disability that requires special academic accommodation, please make an appointment to speak with me within the first three weeks of the semester in order to discuss any adjustments. It is the student’s responsibility to notify the Disability Resource Center of any impairment/condition that may require accommodations and/or classroom modifications. To request information about academic adjustments, auxiliary aids, or services, please contact the Disability Resource Center in the Office of the Dean of Students, 830 Young Hall, (765) 494-1247 (V/TTY), [drc@purdue.edu](mailto:drc@purdue.edu).

### **Nondiscrimination Policy**

Please review the University Nondiscrimination Policy Statement on the Brightspace course site.

### **Violent Behavior Policy**

Please review the University Violent Behavior Policy Statement on the Brightspace course site.

### **Emergency Preparedness Policy**

Please review the University Emergency Procedures Guide linked on the Brightspace course site.

### **Disclaimer**

In the event of a major emergency, the requirements, deadlines, and grading policies in this syllabus are subject to changes that may be required by a revised semester calendar. Any such changes in this course will be posted, once the course resumes, on the course website or can be obtained by contacting the instructor via email or phone.