Term Information

Effective Term	Spring 2026

General Information

Course Bulletin Listing/Subject Area	Slavic Languages & Literatures
Fiscal Unit/Academic Org	Slavic/East European Eurasian - D0593
College/Academic Group	Arts and Sciences
Level/Career	Undergraduate
Course Number/Catalog	3721
Course Title	The Nuclear Age: Soviet Atomic Projects in Global Perspective
Transcript Abbreviation	The Nuclear Age
Course Description	This course invites students to explore the cultural, social, and political histories of nuclear power as both a symbol of modernity and a deeply ambivalent force. Focusing on the Soviet Union and its successor states, the course places these histories in global context, tracing how different societies have grappled with the promises and perils of nuclear energy.
Semester Credit Hours/Units	Fixed: 3

Offering Information

Length Of Course	14 Week, 12 Week, 8 Week, 7 Week, 6 Week, 4 Week
Flexibly Scheduled Course	Never
Does any section of this course have a distance education component?	No
Grading Basis	Letter Grade
Repeatable	No
Course Components	Lecture
Grade Roster Component	Lecture
Credit Available by Exam	No
Admission Condition Course	No
Off Campus	Never
Campus of Offering	Columbus, Lima, Mansfield, Marion, Newark, Wooster

Prerequisites and Exclusions

Prerequisites/Corequisites	
Exclusions	Not open to students with credit for History 3721.
Electronically Enforced	No

Cross-Listings

Cross-Listings	Cross-listed in History

Subject/CIP Code

Subject/CIP Code	16.0400
Subsidy Level	Baccalaureate Course
Intended Rank	Freshman, Sophomore, Junior, Senior

Requirement/Elective Designation

Sustainability

Course Details

Course goals or learning objectives/outcomes

- Situate the history and cultural perception of the atomic age within discourses about sustainability;
- Learn how works about the atomic age are internally structured and analyze case studies at the intersection of sustainability and nuclear humanities
- Demonstrate a developing sense of self as a learner through writing, oral reflections, and creative assignments about the history and culture of the atomic age in dialogue with present sustainability challenges.
- Bring together and critically examine academic, artistic, and everyday discourses that present nuclear energy both as a guarantor of sustainable economic development and as a potential threat to humanity and the environment.
- Analyze the interconnections of social, political, technological, and environmental dimensions in the historical and cultural study of the atomic age during the Cold War and its aftermath.
- Devise informed and meaningful responses to discussions about nuclear energy and sustainable development.
- Outline the role of AI in current debates on nuclear energy and weaponry, particularly in relation to military planning and the critical assessment of resource consumption.

Content Topic List

- Sustainability and its three pillars (“profits, planet, and people”);–Nuclear Energy in Environmental, Cultural, and Political Contexts ; Radioactivity in Historical Context;
- The impact of Circulation of Technology on Political and Social Networks
- Nuclear Energy and Soviet Modernity; Risk and Socio-technical systems; Atom Against Humanity; Human Security and Environmental Impact; Gambling with Armageddon, Global Governance, and Precautionary Principle;
- Technological Optimism, Ecological Limits; Plutopia and the MAD; Ethical Dimensions of Technological Development; Chernobyl, Legacy Contamination and Remediation; The Nuclear and the Human; Cultural and Psychological Resilience;
- Literature and Art After Chernobyl; Nuclear Science, Anti-Nuclear Movements, and Social Responsibility: Andrei Sakharov; Indigenous Trauma and Resistance; Nuclear Uncanny; Dark Heritage; Nuclear Waste and Planetary Futures; Slow Violence

Sought Concurrence

No

Attachments

- Slavic 3721 GE submission.docx: Slavic/History 3721 GE submission

  (Other Supporting Documentation. Owner: Ernst,Joseph)
- Arzyutov - Nuclear Age_FINAL.docx: Syllabus 3721 10/14

  (Syllabus. Owner: Ernst,Joseph)

Comments

- Please see Subcommittee feedback email sent 10/10/25. *(by Neff,Jennifer on 10/10/2025 02:21 PM)*
- History and Slavic submitted both 9/17 *(by Ernst,Joseph on 09/17/2025 03:03 PM)*

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Ernst,Joseph	09/17/2025 03:03 PM	Submitted for Approval
Approved	Ernst,Joseph	09/17/2025 03:03 PM	Unit Approval
Approved	Vankeerbergen,Bernadette Chantal	09/22/2025 09:53 AM	College Approval
Revision Requested	Neff,Jennifer	10/10/2025 02:21 PM	ASCCAO Approval
Submitted	Ernst,Joseph	10/14/2025 11:09 AM	Submitted for Approval
Approved	Ernst,Joseph	10/14/2025 11:09 AM	Unit Approval
Approved	Vankeerbergen,Bernadette Chantal	10/15/2025 10:28 AM	College Approval
Pending Approval	Jenkins,Mary Ellen Bigler Neff,Jennifer Vankeerbergen,Bernadette Chantal Steele,Rachel Lea	10/15/2025 10:28 AM	ASCCAO Approval

SYLLABUS

RUSSIAN & HISTORY 3721

THE NUCLEAR AGE: SOVIET ATOMIC PROJECTS IN GLOBAL PERSPECTIVE

Full term, 3 credit hours

COURSE OVERVIEW

Instructor

Instructor: Dr. Dmitry (Dima) Arzyutov, Assistant Professor, Department of Slavic and East European Languages and Cultures
Email address: arzyutov.1@osu.edu
Office: 416 Hagerty Hall
Office hours: TBD

Prerequisites

None.

Course description

In the 20th century, the world entered the nuclear age—a time defined by breathtaking technological advancement and the unsettling realization that human progress could carry the seeds of planetary peril. As nuclear capabilities expanded, so too did awareness of their potential to reshape not only geopolitics, but the fate of life on Earth itself. Today, with nuclear tensions once again on the rise, the need to reflect on this legacy feels more urgent than ever. Titled “The Nuclear Age,” this course invites students to explore the cultural, social, and political histories of nuclear power as both a symbol of modernity and a deeply ambivalent force. Focusing on the Soviet Union and its successor states, the course places these histories in global context, tracing how different societies have grappled with the promises and perils of nuclear energy. Through a close study of pivotal events—

including nuclear weapons testing in Kazakhstan and the Arctic, the 1986 Chornobyl disaster in Ukraine, and a series of "peaceful" nuclear explosions that permanently altered Eurasian landscapes—students will examine how nuclear development has left enduring marks on bodies, environments, and cultural memory. These case studies provide entry points into broader reflections on risk, resilience, and the limits of human control over powerful technologies. Students will engage with a diverse range of materials, from Russian, Kazakh, Uzbek, Japanese, and Western films to documentaries (including declassified), fiction, art, and propaganda. These sources will be analyzed in conversation with contemporary debates in sustainability studies and the natural, social, and human sciences—fields that increasingly reckon with the long-term consequences of the nuclear age. As a special component, the course includes a visit to the Ohio State University Nuclear Reactor Laboratory (est. 1960), offering students a rare opportunity to observe nuclear infrastructure firsthand and to consider the ongoing role of nuclear technology in shaping future energy strategies, environmental futures, global security, and the development of AI technologies.

Course learning outcomes

By the end of this course, students should successfully be able to:

- Situate the history and cultural perception of the atomic age within discourses about sustainability.
- Learn how works about the atomic age have been internally structured and analyze case studies at the intersection of sustainability and nuclear humanities.
- Identify, describe, and synthesize academic, literary, and artistic intellectual trends at the intersections of discussions about sustainability and nuclear energy.
- Demonstrate a developing sense of self as a learner through writing, oral reflections, and creative assignments about the history and culture of the atomic age in dialogue with present sustainability challenges.
- Bring together and critically examine academic, artistic, and everyday discourses that present nuclear energy both as a guarantor of sustainable economic development and as a potential threat to humanity and the environment.
- Analyze the interconnections of social, political, technological, and environmental dimensions in the historical and cultural study of the atomic age during the Cold War and its aftermath.
- Devise informed and meaningful responses to discussions about nuclear energy and sustainable development.
- Outline the role of AI in current debates on nuclear energy and weaponry, particularly in relation to military planning and the critical assessment of resource consumption.

General education goals and expected learning outcomes

As part of the *Sustainability* theme, this course is designed to prepare students to be able to achieve the following goals, formulated by the Ohio State General Education curriculum:

GOAL 1. Successful students will analyze an important topic or idea at a more advanced and in-depth level than in the Foundations component.

1.1. Engage in critical and logical thinking about the topic or idea of the theme.
1.2. Engage in an advanced, in-depth, scholarly exploration of the topic or idea of the theme.

GOAL 2: Successful students will integrate approaches to the theme by making connections to out-of-classroom experiences with academic knowledge or across disciplines and/or to work they have done in previous classes and that they anticipate doing in future.

2.1. Identify, describe, and synthesize approaches or experiences as they apply to the theme.
2.2. Demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, building on prior experiences to respond to new and challenging contexts.

GOAL 3: Successful students will analyze and explain how social and natural systems function, interact, and evolve over time; how human well-being depends on these interactions; how actions have impacts on subsequent generations and societies globally; and how human values, behaviors, and institutions impact multifaceted potential solutions across time.

3.1. Describe elements of the fundamental dependence of humans on Earth and environmental systems, and on the resilience of these systems.
3.2. Describe, analyze, and critique the roles and impacts of human activity and technology on both human society and the natural world, in the past, present, and future.
3.3. Devise informed and meaningful responses to problems and arguments in the area of sustainability based on the interpretation of appropriate evidence and an explicit statement of values.

How the course addresses the GE goals:
The present course focuses on the atomic age—an era that marked the beginning of discussions about sustainability. By examining the Soviet and Eurasian world within a global perspective, students will recognize the planetary impact of both nuclear catastrophes and so-called “peaceful” nuclear power projects. Through this dialogue between the local and the global, the national and the transnational, the futuristic and the catastrophic—as well as between key concepts in sustainability studies and the historical and cultural contexts of nuclear history—students will assess the complexity of the topic and develop independent perspectives on urgent themes such as nuclear energy and sustainability. For a deeper and more nuanced understanding, students will engage with

literature from diverse disciplines, alongside art, fiction, and propaganda materials, while also cultivating research skills for their future endeavors—through oral expression, writing, and communication with AI platforms.

HOW THIS COURSE WORKS

Mode of delivery: This course is taught in person. We meet twice a week.

Credit hours and work expectations: This is a **3-credit-hour course**. According to Ohio State policy (go.osu.edu/credithours), students should expect around 3 hours per week of time spent on direct instruction (instructor content and Carmen activities, for example) in addition to 6 hours of homework (reading and assignment preparation, for example).

Attendance and participation requirements:

- **Preparation**: **AT THE VERY BEGINNING OF EACH WEEK**
  All class meetings will have assigned readings or films that you are expected to complete beforehand. Be sure to take notes and prepare questions or comments so that we can engage in productive discussions together. Optional readings or viewings are also provided to help you expand on the ideas covered in each class and explore the topics in greater depth.
- **Class meetings: TWICE WEEKLY**
  Our class meets in person twice weekly.
- **Office hours**: **OPTIONAL**
  Office hours are your opportunity to consult about presentations, research projects, or ask other questions we did not address in class. Do not hesitate to take advantage of them as needed.

COURSE MATERIALS AND TECHNOLOGIES

Course materials

All course materials are provided as PDF copies of book chapters and articles (can be found on Carmen) and links to open sources.

Course technology

Technology support

For help with your password, university email, Carmen, or any other technology issues, questions, or requests, contact the Ohio State IT Service Desk. Standard support hours are available at ocio.osu.edu/help/hours, and support for urgent issues is available 24/7.

- **Self-Service and Chat support:** ocio.osu.edu/help
- **Phone:** 614-688-4357(HELP)
- **Email:** servicedesk@osu.edu

- **TDD:** 614-688-8743

Technology skills needed for this course

- Basic computer and web-browsing skills.
- Navigating Carmen (go.osu.edu/canvasstudent)

Required equipment

- Computer: current Mac (MacOs) or PC (Windows 10) with high-speed internet connection. Other: a mobile device (smartphone or tablet) to use for BuckeyePass authentication

Required software

- Microsoft Office 365: All Ohio State students are now eligible for free Microsoft Office 365, including Microsoft Copilot. Full instructions for downloading and installation can be found at go.osu.edu/office365help.

Carmen access

You will need to use BuckeyePass (buckeyepass.osu.edu) multi-factor authentication to access your courses in Carmen. To ensure that you are able to connect to Carmen at all times, it is recommended that you take the following steps:

- Register multiple devices in case something happens to your primary device. Visit the BuckeyePass - Adding a Device help article for step-by-step instructions (go.osu.edu/add-device).
- Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click **Enter a Passcode** and then click the **Text me new codes** button that appears. This will text you ten passcodes good for 365 days that can each be used once.
- Download the Duo Mobile application (go.osu.edu/install-duo) to all of your registered devices for the ability to generate one-time codes in the event that you lose cell, data, or Wi-Fi service

If none of these options will meet the needs of your situation, you can contact the IT Service Desk at 614-688-4357(HELP) and IT support staff will work out a solution with you.

GRADING AND FACULTY RESPONSE

How your grade is calculated

ASSIGNMENT CATEGORY	POINTS
Attendance and participation	15
Thinking with AI (Microsoft Copilot)	20

Blogposts	10
Take-Home Midterm: Oral History Project	25
Final project	30
Total	**100**

See the course schedule below for due dates.

Descriptions of major course assignments

Attendance and Participation

Your participation grade accounts for 15 points of your grade for this class. Participation grades are posted four times per semester. The expectations for the respective grades are:

100%	You are **present in class**, did **homework assignments/readings**. You **actively** participate with **meaningful and original** contributions. You engage with the **contributions of others**, encouraging a discussion that accommodates **diverse experience and opinions**.
85%	You are **present in class** and are ready to answer questions when approached by the professor, but do **not take the initiative** to participate. Or: you demonstrate that you have **read the assigned texts**, but might not have been able to come up with your own thoughts or ideas about them. Or: you may not have done the complete homework, but **make up for it through active participation in class**.
75%	You are present in class, but do not actively participate and are not ready to actively contribute or answer questions when asked. In your in-class writing assignments you **cannot demonstrate that you have read the assigned texts or retained information from them**. You did not do the assigned homework.
0%	You are not physically present in the classroom or missed more than 25% of the class meeting.

Thinking with AI (Microsoft Copilot)

This assignment is collaborative and requires groups of three students. During the first week, you will form a group and sign up for one of the topics to explore with AI (Microsoft Copilot). Each student will independently engage with the AI on the chosen topic within the theme of sustainability and the nuclear age. They will then compare the responses within the group. Together, your group will prepare a 10-minute in-class presentation that (1) critically examines the accuracy and potential bias of the AI's answers through group discussion, and (2) integrates your reflections, along with the AI's responses, into dialogue with the assigned course literature. Presentations will take place between Weeks 4 and 11

and will be anonymously evaluated by your classmates. Topics, detailed instructions, and evaluation rubrics are available on Carmen.

Blog posts

This assignment consists of four blog posts to be completed over the duration of the course. The first blog post will be written at the beginning of the class and should reflect students' encounters with discussions about nuclear energy and/or weaponry, as well as why they believe these discussions remain important today in the United States and worldwide as an element of (un)sustainable strategies for human engagement with technology. Two additional blog posts will be submitted at the conclusion of the first and third thematic units and will focus on visual representations of nuclear energy and weaponry in films, cartoons, and documentaries and the way these representations provide a commentary on the impact of technology on both human society and the natural world. And one more blog post will follow the visit to the OSU Nuclear Reactor Laboratory. Each blog post should be 300–400 words in length and must be submitted through the Carmen discussion board. Detailed instructions and the grading rubric are available on Carmen.

Take-Home Midterm: Oral History Project

The midterm in Week 8 will be a take-home exam in the form of an oral history project. You will interview a friend or relative from an older generation about their perceptions of the nuclear threat and the future of nuclear power. A questionnaire with four prompt questions will be provided on Carmen. Based on your interview, you will write a 1,000-word essay that presents your interviewee's responses (kept anonymous in the text) within the context of our course readings, your notes, and lecture materials. This way, you will reveal arguments in the area of sustainability based on the interpretation of both scholarly evidence and your observation of values expressed by your interviewees. The questionnaire, detailed instructions, and grading rubric are all available on Carmen.

Final project

For the final paper (2,000 words; 6–8 pages, double-spaced, Times New Roman, 12 pt.), you are required to select a pair of weekly concepts discussed in class and apply them to the debate on the future of nuclear energy and weaponry as a technology that deeply impacts human society and culture as well as the natural environment in Eurasia and globally. To do so, you must analyze one of the case studies covered in class or another historical case from the nuclear age. Research should be conducted using the OSU library and its book and journal databases, and all sources must be cited in your text. Drawing on these materials, as well as course readings and lectures, you will write your final paper. By Week 9, you must post your selected topic along with a 200-word abstract. Detailed instructions—including the list of concept pairs, requirements for primary and secondary sources, formatting guidelines, and the grading rubric—are available on Carmen.

Late assignments

An assignment is late if not turned in by the due date. For late assignments, I will reduce the grade by 5 points for each class session that it is late. If you have a legitimate excuse for not turning in work on time, you must request an extension before the assignment is due.

Grading scale

A	93-100
A-	90-92
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D+	67-69
D	60-66
E	0-59

Instructor feedback and response time

I am providing the following list to give you an idea of my intended availability throughout the course. (Remember that you can call **614-688-4357(HELP)** at any time if you have a technical problem.)

- **Grading and feedback:** For large weekly assignments, you can generally expect feedback within **7 days**.
- **Email:** I will reply to emails within **36 hours during school days**.

OTHER COURSE POLICIES

Discussion and communication guidelines

The following are my expectations for how we should communicate as a class. Above all, please remember to be respectful and thoughtful.

- **Writing style**: Sometimes we will have short in-class writing assignments (so-called "thinking through writing" exercises). While you should aim for correct spelling and punctuation, these do not have to be polished in style. The purpose of these exercises is predominantly to develop and exchange ideas.
- **Tone and civility**: Our goal should be to maintain a supportive learning community where everyone feels safe and where people can disagree amicably.
- **Citing your sources**: When we have academic discussions, please cite your sources to back up what you say. For the textbook or other course materials, list at least the title and page numbers. For online sources, include a link.

- **Backing up your work**: Consider composing your academic posts in a word processor, where you can save your work, and then copying into the Carmen discussion.

Rules and Regulations

Please review the syllabus policies and statements here:
https://ugeducation.osu.edu/academics/syllabus-policies-statements

Accessibility of course technology

This online course requires use of CarmenCanvas (Ohio State's learning management system) and other online communication and multimedia tools. If you need additional services to use these technologies, please request accommodations with your instructor.

- Canvas accessibility (go.osu.edu/canvas-accessibility)
- Streaming audio and video
- CarmenZoom accessibility (go.osu.edu/zoom-accessibility)
- Collaborative course tools

COURSE SCHEDULE

PART I. INTRODUCTION

Week 1: INTRODUCTION TO THE COURSE

Nuts and Bolts – Nuclear Energy in Environmental, Cultural, and Political Contexts – Nuclear Disasters – Key Concepts of the Course

Concepts of the week: "sustainability" and its three pillars ("profits, planet, and people")

Reading:

Syllabus

[*political science*]: Ferguson, Charles D. 2011. *Nuclear Energy: What Everyone Needs to Know*. New York: Oxford University Press. (Ch. 1)

Watch:

[*Japanese cartoon*]: Takahata, Isao, dir. 1988. *Grave of the Fireflies*. 1h28m [free on Dailymotion] -- https://dai.ly/x9d0mo8

Assignment: Blogpost due on XXX: Write a 300-word essay about your own encounters with the nuclear and why you think discussions about nuclear energy are important today

in the US and worldwide. Detailed instructions and the grading rubric are available on Carmen.

Reminder: Form a group and choose a topic and presentation date for the "Thinking with AI (Microsoft Copilot)" project (due date: XXX). On Carmen, post the names of your group members together with the selected topic and presentation date. Check out Carmen for details.

Week 2: Radioactivity in Historical Context

Radioactivity – Marie and Pierre Curie –Nuclear Energy Between Radiant Techno-Futurism and Dark Apprehension – Discussions and Experiments – The Impact of Circulation of Technology on Political and Social Transnational Networks

Concept of the week: "circulation of knowledge"

Reading (academic):

[*history*]: Malley, Marjorie C. 2011. *Radioactivity: A History of a Mysterious Science*. Oxford; New York: Oxford University Press. [selected 15 pages]

Reading (fiction):

[*English author*] Wells, Herbert. 1913. *The World Set Free* – https://www.gutenberg.org/files/1059/1059-h/1059-h.htm [Preface: section 8]

Watch:

[*American movie*]: LeRoy, Mervyn, dir. 1943. *Madame Curie*. 2h03m – https://archive.org/embed/madame-curie

Reminder: Schedule a date to conduct an interview with your relative or friend for your midterm project.

Week 3: Nuclear Energy and Soviet Modernity

Soviet Modernity – Industrialization – GULAG – Geography and Politics of Nuclear Networks (Energy Resources, Laboratories, Test Sites, Nuclear Power Plants) – Sites of Impact of Nuclear Technology on the Natural World

Concepts of the week: "risk" and "socio-technological systems"

Note: Before the class, please revisit your notes from Week 2.

Reading (academic):

[*sociology*]: Irwin, Alan, Stuart Allan, and Ian Welsh. 2000. "Nuclear Risks." In *The Risk Society and Beyond: Critical Issues for Social Theory*, edited by Barbara Adam, Ulrich Beck, and Joost Van Loon, 78–104. London, Thousand Paks, New Delhi: SAGE.

Watch:

[*American documentary*]: Wain Fimeri, dir. 2015. *Uranium – Twisting the Dragon's Tail* (Episode 1). 54 m [free on Dailymotion] – https://dai.ly/x7ze3dq

Optional reading:

[*history of technology*:] Högselius, Per, and Achim Klüppelberg. 2024. *The Soviet Nuclear Archipelago: A Historical Geography of Atomic-Powered Communism*. Budapest: Central European University Press. https://library.oapen.org/handle/20.500.12657/89496 (Ch. 3 'Bomb geographies')

Reminder: Continue working on the "Thinking with AI (Microsoft Copilot)" project (due date: XXX). Check out Carmen for details.

PART II. THE COLD-WAR ATOM: BETWEEN ARMAGEDDON AND "PLUTOPIA"

Week 4: ATOM AGAINST HUMANITY

The Manhattan Project – J. Robert Oppenheimer – The Nuclear Bombing of Hiroshima and Nagasaki – Doomsday Watch – Stalin and the Soviet Atomic Bomb Project

Concepts of the week: "human security" and "environmental impact"

Note: Before the class, please revisit your notes from Weeks 2 and 3.

Reading (academic):

[*history*]: Hijiya, James A. 2000. "The 'Gita' of J. Robert Oppenheimer." *Proceedings of the American Philosophical Society* 144 (2): 123–67.

[*history*]: Holloway, David. 1994. *Stalin and the Bomb: The Soviet Union and Atomic Energy, 1939-1956*. New Haven and London: Yale University Press. [Ch. 10]

Watch (historical documentaries):

[*American documentary*]: Jack Glenn, dir. 1946. *Atomic Power*. 18 m. – https://www.youtube.com/watch?v=RaQKvaJUt7o

[*Soviet declassified documentary*] *50 Megaton Tsar Bomba Declassified*. 40 min. – https://youtu.be/XJhZ3i-HXS0?si=g4QvbksrFkyx0FbM [with English subtitles]

Optional historical interview

J. Robert Oppenheimer's Interview [Voices of the Manhattan Project] – https://ahf.nuclearmuseum.org/voices/oral-histories/j-robert-oppenheimers-interview/

Optional watch (movie):

[*American movie*]: Nolan, Christopher. dir. 2023. *Oppenheimer*. 180 min. [Amazon Prime Video subscription] – https://www.amazon.com/gp/video/detail/B0CKRXGGQB/ref=atv_dp_share_cu_r

Optional music (listen and watch):

[*Soviet music about the victims of the Nagasaki bombing*]: Schnittke, Alfred, 1958. *Nagasaki*. Oratorio. 40 min. – https://youtu.be/3j9VLg3be2w?si=aSxiY_L9lSgQht71

Assignment: Blogpost due on XXX: Write a 300-word essay about the visual representation of nuclear science in movies (week 2) and documentaries (week 3). Detailed instructions and the grading rubric are available on Carmen.

Reminder: Continue working on the "Thinking with AI (Microsoft Copilot)" project (due date: XXX). Check out Carmen for details.

Week 5: GAMBLING WITH ARMAGEDDON

The Cold War and Nuclear Technologies – Soviet/American Espionage – The Cuban Missile Crisis (October 16–28, 1962) – Responsibility of Scholars, Military, and Engineers – Global Geography of Nuclear Test Sites

Concepts of the week: "global governance" and "precautionary principle"

Note: Before the class, please revisit your notes from Week 3.

Reading (academic):

[*history*]: Lebow, Richard Ned, and Benoît Pelopidas. 2023. "Facing Nuclear War: Luck, Learning, and the Cuban Missile Crisis." In *The Oxford Handbook of History and International Relations*, edited by Mlada Bukovansky, Edward Keene, Christian Reus-Smit, and Maja Spanu, 705–20. Oxford; New York:

Oxford University Press. https://doi.org/10.1093/oxfordhb/9780198873457.013.47.

Watch:

[*Danish docudrama*] Peter Anthony, dir. 2015. *The Man Who Saved the World*. 110 m. [free on Tubi] - https://tubitv.com/movies/457157/the-man-who-saved-the-world

Optional watch (movies):

Hitchcock, Alfred, dir. 1969. *Topaz*. 143 m. [OSU Secured Media Library]

Meyer, Nicholas, dir. (1983). *The Day After*. 126 m. https://youtu.be/TOPaaHSjMcw?si=usaYmXkPXkUaExwy or https://dai.ly/x88sxqq

Assignment: Presentation of "Thinking with AI" projects in class. Check out Carmen for details.

Reminder: Continue working on your essay for the Midterm exam. Check out Carmen for details.

Week 6: Atom Serving Humanity? The "Peaceful Atom" and Otherwise

The Peaceful Atom: Ideology and Economic Strategy – Nuclear Power Plants – Underground Nuclear Explosions in the North and Siberia – Environmental and Social Consequences – Utopian Visions of Sustainable and Peaceful Uses and Their Failure.

Concepts of the week: "technological optimism" and "ecological limits"

** Tour of The Ohio State University Nuclear Reactor Laboratory*

Note: Before the class, please revisit your notes from Weeks 3.

Reading (academic):

[*history*]: Josephson, Paul. 2022. *Nuclear Russia: The Atom in Russian Politics and Culture*. London, New York, Dublin: Bloomsbury. (Chapter 4)

[*history*] Drogan, Mara. 2019. "The Atoms for Peace Program and the Third World." *Cahiers du Monde Russe* 60 (2): 441–60. https://doi.org/10.4000/monderusse.11249

Watch (documentary):

Dwight D. Eisenhower's "Atoms for Peace" Speech in the UN, 1953. 25 m. - https://youtu.be/oxGSfOd1Dpc?si=jHtskubPLXf3yyXB

Watch (movie):

[*Soviet movie*] Tarkovsky, Andrei, dir. 1979. *Stalker* [with English subtitles] 2h 40 min. https://youtu.be/Q3hBLv-HLEc?si=UFHA5YdARwe7tFJV

Reminder: Continue working on your essay for the Midterm exam. Check out Carmen for details.

Week 7: "PLUTOPIA" AND THE MAD [MUTUAL ASSURED DESTRUCTION]

The Mutual Assured Destruction Doctrine [MAD] and the Cold War Culture – The Role of Nuclear Physicists in Soviet Society – Permitted Freedoms and Ideological Limitations – Closed Laboratories, Cities, and Restricted Zones: "Plutopia" and Nuclear Communities – Nuclear Enemies – Nuclear Anxiety and Public Sentiment

Concept of the week: "ethical dimensions of technological development"

Note: Before the class, please revisit your notes from Weeks 3, 4, 5, 6.

Reading (academic):

[*anthropology*] Brown, Kathryn L. 2013. *Plutopia: Nuclear Families, Atomic Cities, and the Great Soviet and American Plutonium Disasters*. Oxford: Oxford University Press. [Introduction; Ch. 15 and 38]

Watch (movie/ music/cartoon):

[*Soviet movie*] Mikhail Romm, dir. 1962. *Nine Days in One Year* [*Девять дней одного года*; with English subtitles]. 1 h. 50 m. https://youtu.be/HGf-cZZDH3s?si=jl0vV0KCGmoeZEs9

[*American music*]: Soul Stirrers, 1950. *Jesus Hits Like an Atom Bomb*. – https://youtu.be/Hi5q3Gq6UhI?si=KVgrgqypC7U6qvXf

[*Soviet music*]: Red Army Choir. 1951. *Atomic Bomb* [with English subtitles] – https://youtu.be/87T9JXNly9I?si=GDrefAYpRx3AZ9-r

[*Soviet/Uzbek cartoon*] To'laxo'jayev, Nozim. 1984. *There Will Come Soft Rains* [*Будет ласковый дождь*; with English subtitles]. 10 m. https://youtu.be/u7aKdWVxk2c?si=TJqVsH_kHjmReQDk

Read also: Bradbury, Ray. *There Will Come Soft Rains* (5 pages) – https://www.btboces.org/Downloads/7_There%20Will%20Come%20Soft%20Rains%20by%20Ray%20Bradbury.pdf

[*British music*] Iron Maiden, 1984. *Two Minutes to Midnight* – https://youtu.be/9qbRHY1l0vc?si=AZYPcqVb5YSX7Dm0

[*British music*] Sting, 1985. *Russians* – https://youtu.be/wHylQRVN2Qs?si=L19-YYr_i9JXLQBy

Optional reading (academic):

[*history*]: Dobson, Miriam. 2016. "Building Peace, Fearing the Apocalypse?: Nuclear Danger in Soviet Cold War Culture." In *Understanding the Imaginary War: Culture, Thought and Nuclear Conflict, 1945–90*, edited by Matthew Grant and Benjamin Ziemann, 51–74. Manchester: Manchester University Press.

Assignment: Blogpost about the laboratory visit due on XXX: Detailed instructions and the grading rubric are available on Carmen.

Reminder: Continue working on your essay for the Midterm exam. Check out Carmen for details.

PART III. THE CHORNOBYL ERA: APOCALYPSE NOW

Week 8: The Chornobyl Disaster

Nuclear Plant Catastrophes Before Chornobyl (The Three Mile Island accident, 1979) – The Chornobyl Nuclear Power Plant in the Soviet Economy – Causes of the Disaster – Speculations and Theories – The Zone and Beyond – Chornobyl Liquidators – Nuclear Plant Catastrophes After Chornobyl (The 2011 Fukushima Nuclear accident)

Concept of the week: "legacy contamination and remediation"

Note: Before the class, please revisit your notes from Weeks 3, 4, 5, 6.

Reading (academic):

[*history*]: Plokhy, Serhii. 2022. *Atoms and Ashes: A Global History of Nuclear Disasters*. W. W. Norton & Company (Ch. 4, 5, 6).

Watch:

[*TV news*]: Chornobyl Nuclear Disaster: Gorbachev Speaks, May 14, 1986. 03 m. – https://youtu.be/0k3wnXBE5S0?si=aJjAfRojXKciPT7a

Optional watch:

[*HBO mini-series*]: Johan Renck, dir. 2019. *Chernobyl*. (episodes 1 and 5) 2 h. – https://athome.fandango.com/content/browse/details/Chernobyl-Vichnaya-Pamyat/1136783?cmp=Organic

[*American documentary*] Sheena M. Joyce, Don Argott, dir. 2012. *The Atomic States of America* [YouTube/Amazon/Google Play, fee]

Assignment: The due day for your midterm essay is XXXX. Submit it via Carmen.

Reminder: Continue collecting materials for your final project. Check out Carmen for details.

Week 9: The Nuclear and the Human

Radioactive Contamination – Human Body – Resilience of Biological Systems and Lack Thereof – Subjectivity – Belonging to Land – Survival and the Politics of Inequality

Concepts of the week: "cultural and psychological resilience" and "intergenerational equity"

Note: Before the class, please revisit your notes from Weeks 3, 4, 5, 6, 7, 8.

Reading (academic):

[*anthropology*]: Petryna, Adriana. 2004. "Biological Citizenship: The Science and Politics of Chernobyl-Exposed Populations." *Osiris* 19: 250–65.

[*anthropology*]: Stawkowski, Magdalena E. 2016. "'I Am a Radioactive Mutant': Emergent Biological Subjectivities at Kazakhstan's Semipalatinsk Nuclear Test Site." *American Ethnologist* 43 (1): 144–57. https://doi.org/10.1111/amet.12269.

Reading (oral history):

[*Belorussian author/Noble Prize Laureat*]: Alexievich, Svetlana. 2017. *Chernobyl Prayer: A Chronicle of the Future* [*Чернобыльская молитва*]. London: Penguin UK. ["A lone human voice"; "Monologue on how we can talk with both the living and the dead"; "Monologue on Cartesian philosophy and on eating a radioactive sandwich with someone so as not to be ashamed"]

Watch:

[*American documentary*]: Morris, Holly, Bogart, Anne, dirs. 2015. *The Babushkas of Chernobyl*. 1h 10 min. [free on TubiTV] – https://tubitv.com/movies/380826/the-babushkas-of-chernobyl

Optional reading:

[*Japanese physicist and author*]: Nagai, Takashi. 1984. *The Bells of Nagasaki*. Translated by William Johnston. Tokyo: Kodansha International. (selected 15 pages)

[*history*]: Arndt, Melanie. 2025. *Chernobyl Children: A Transnational History of a Nuclear Disaster*. Cambridge: Cambridge University Press. (selected 15 pages)

Reminder: Continue writing your final project. Check out Carmen for details.

Week 10: LITERATURE AND ART AFTER CHORNOBYL

Art and Technological Disasters – Dark Heritage – Risk and Affect – Future and Dystopia

Concept of the week: "dark heritage"

Note: Before the class, please revisit your notes from Weeks 8 and 9.

Reading (fiction):

[*Russian author*]: Tolstaya, Tatyana. 2007. *The Slynx*. Translated by Jamey Gambrell. New York Review of Books. (selected 30 pages)

Watch (movies):

[*Soviet movie*]: Konstantin Lopushansky, dir. 1986. *Dead Man's Letters* [with English subtitles]. 1h 23 m. – https://youtu.be/J31CKDnI9gI?si=CKplC1bGO11woY5B

Listen (music):

[*Soviet music*]: Tariverdiev, Mikael. 1987. *Chernobyl* (symphony). 35 min. – https://youtu.be/FYbt4yfo_E8?si=nBYGHv0aeSbio1Hj

Art:

Thompson, Helen. 2014. *Chernobyl's Bugs: The Art And Science Of Life After Nuclear Fallout* – https://www.smithsonianmag.com/arts-culture/chernobyls-bugs-art-and-science-life-after-nuclear-fallout-180951231/

Videogames:

Chernobylite. 11 min. - https://youtu.be/H4UcWjMKGhQ?si=LU-HNmKkKXZacaXD

Dark Heritage Tourism (watch and read):

Holiday in Chernobyl: Tourism in the Exclusion Zone (2016). 13 min. - https://www.youtube.com/watch?v=ok9bPgKt_WI

Optional reading (academic):

[*Amirian cultural studies*]: Borenstein, Eliot. 2015. "Dystopias and Catastrophe Tales after Chernobyl." In *Russian Literature since 1991*, edited by Evgeny Dobrenko and Mark Lipovetsky, 86–103. Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9781107705951.005.

Reminder: Continue writing your final project. Check out Carmen for details.

Week 11: Nuclear Science, Anti-Nuclear Movements, and Social Responsibility: Andrei Sakharov

Nuclear Science and Social Responsibility – Global and Soviet Anti-Nuclear Movements and Organizations – Andrei Sakharov: Life, Science, and Activism – Nuclear Disarmament

Concepts of the week: "responsibility" and "system thinking"

Note: Before the class, please revisit your notes from Weeks 2, 6, 7, 10.

Reading (academic):

[*history*]: Bergman, Jay. 2009. *Meeting the Demands of Reason: The Life and Thought of Andrei Sakharov*. Ithaca and London: Cornell University Press (Chapter 16).

Reading (historical documents):

Sakharov, Andrei D. 1969. "The Threat of Nuclear War." *American Scientist* 57 (1): 167–71.

Sakharov, Andrei. 1981. "The Social Responsibility of Scientists." *Physics Today* 34 (6): 25–30. https://doi.org/10.1063/1.2914603.

Watch (documentaries):

[*Soviet anti-war documentary*] *For peace, for life* [R. *За мир, за жизнь*]. 1985. 45 min [in English; available through OSU library]

Optional watch (movie):

Gold, Jack. 1984. *Sakharov.* 1h 59 min. – https://youtu.be/HE1y2pRWrWk?si=jWbxosCSoGm6rwqo

Optional watch (documentary):

Walker, Lucy. 2010. *Countdown to Zero*. 1h 28 min. [free on TubiTV, Amazon Prime Video and others] – https://tubitv.com/movies/512718/countdown-to-zero

Levitt, Fern, dir. 2013. *Sakharov – Conscience of a Country*. 48 min. – https://youtu.be/XsDNIlWpPaM?si=iIdslmTb8JewzHUq

Reminder: Continue writing your final project. Check out Carmen for details.

PART IV. THE POST-SOVIET ATOM: SOVIET LEGACY

Week 12: Indigenous Trauma and Resistance

Indigenous sovereignty, resistance, and nuclear bombs – Semipalatinsk – Novaya Zemlya – Nevada – Alaska – Bikini

Concept of the week: "nuclear uncanny"

Note: Before the class, please revisit your notes from Weeks 5, 6, 9, 10

Reading (academic):

[*folklore studies/anthropology*]: Lukin, Karina. 2017. "Leaving Novaîa Zemlîa: Narrative Strategies of the Resettlement of the Nenets." *Arctic Anthropology* 54 (1): 32–45. https://doi.org/10.3368/aa.54.1.32.

[*American Indian studies*] Rozsa, George Gregory. 2020. "The Nevada Movement: A Model of Trans-Indigenous Antinuclear Solidarity." *Journal of Transnational American Studies* 11 (2): 99-123. https://doi.org/10.5070/T8112049586.

Watch:

Stone, Robert, dir. 1988. *Radio Bikini*. 56 m. – https://youtu.be/5XMc_S_1PgA?si=IX2KbPp1m8J1YikL

Sergei Shafir, dir. 1990. *Nevada-Kazakhstan*. 10 min – https://youtu.be/1z28IPcWFI4?si=PEMeNIwdD4Dn7r8y

Optional reading:

[*anthropology*]: Masco, Joseph. 2006. *The Nuclear Borderlands: The Manhattan Project in Post-Cold War New Mexico*. Princeton: Princeton University Press. (selected 15 pages)

[*Indigenous studies*]: Teaiwa, Teresia K. 1994. "Bikinis and Other s/Pacific n/Oceans." *The Contemporary Pacific* 6 (1): 87–109.

[*Indigenous memoirs*]: Kohlhoff, Dean W. 2002. *Amchitka and the Bomb: Nuclear Testing in Alaska*. Seattle and London: University of Washington Press. (selected 15 pages)

Assignment: Blogpost due on XXX: Write a 300-word essay about the visual representation of nuclear science in movies, documentaries, and cartoons (week 4-11). Detailed instructions and the grading rubric are available on Carmen.

Reminder: Continue writing your final project. Check out Carmen for details.

Week 13: Nuclear Waste and Planetary Futures

Nuclear Waste: Disposal, Fallout, and Leaks – Slow Violence – Energy Sustainability – The Future of Nuclear Energy

Concept of the week: "slow violence"

Note: Before the class, please revisit your notes from Weeks 4, 6, 11

Reading (academic)

[*political science*]: Kasperski, Tatiana. 2019. "From Legacy to Heritage: The Changing Political and Symbolic Status of Military Nuclear Waste in Russia." *Cahiers Du Monde Russe. Russie - Empire Russe - Union Soviétique et États Indépendants* 60 (2–3): 517–38. https://doi.org/10.4000/monderusse.11277.

[*science and technology studies*] Schmid, Sonja D. 2019. "A New 'Nuclear Normalcy'?" *Journal of International Political Theory* 15 (3): 297–315. https://doi.org/10.1177/1755088218796674.

[*political science*]: Ferguson, Charles D. 2011. *Nuclear Energy: What Everyone Needs to Know*. New York: Oxford University Press. (Ch. 8)

Reading (journalism)

Life in Fallout Zones – https://easteast.world/posts/224

Watch (documentary):

Stone, Oliver. dir. 2022. *Nuclear Now.* 1h 45 min. (free on TubiTV) – https://tubitv.com/movies/100013889/nuclear-now

Optional reading (academic):

[*environmental humanities*] Nixon, Rob. 2011. *Slow Violence and the Environmentalism of the Poor*. Cambridge (Mass.) and London: Harvard University Press. (Introduction)

[*anthropology*]: Masco, Joseph. 2021. *The Future of Fallout, and Other Episodes in Radioactive World-Making*. Durham and London: Duke University Press. (selected 15 pages)

Optional watch (documentary):

Klaus Feichtenberger, dir. 2011. *Radioactive Wolves*. 53 min. – https://weta.org/watch/shows/nature/radioactive-wolves

Madsen, Michael, dir. 2010. *Into Eternity*. 1h 19 min. – https://youtu.be/ayLxB9fV2y4?si=DA8TotKQKGgk4lYi

Reminder: Continue writing your final project. Check out Carmen for details.

Week 14: Presentation of Students' Projects; Final Discussion

Final discussion: Discussing Kubrick's Film (1964) – Nuclear Energy and AI – Reviewing the Course Materials: What to Improve and What to Change

Reading:

[*journalism*] Witze, Alexandra. 2025. "How to Avoid Nuclear War in an Era of AI and Misinformation." *Nature* 643 (8073): 898–900. https://doi.org/10.1038/d41586-025-02260-z.

Watch:

Stanley Kubrick, dir. 1964. *Dr. Strangelove or: How I Learned to Stop Worrying and Love the Bomb*. 94 min. [OSU Secured Media Library]

Assignment: Final project presentation. Check out Carmen for details.

THE NUCLEAR AGE: SOVIET ATOMIC PROJECTS IN GLOBAL PERSPECTIVE
SLAVIC 3385

In a sentence or two, explain how this class "fits' within the focal Theme. This will help reviewers understand the intended frame of reference for the course-specific activities described below.

> *The present course focuses on the atomic age—an era that marked the beginning of discussions about sustainability. Through the analysis of the history of nuclear projects, political actions and discussions in the Soviet Union and internationally, students get better and deeper understanding of the development of sustainability studies ideas and their current actuality.*

ELO 1.1 Engage in critical and logical thinking:

> *This course will develop skills in critical and logical thinking about the role of nuclear energy and weaponry in shaping debates on sustainability. By tracing the chronological development of nuclear projects in the Soviet Union and globally, students will examine both the progressivist and peril-centered ideologies that have surrounded them. Weekly readings and films drawn from a variety of intellectual and cultural traditions will introduce students to diverse critical approaches to nuclear energy and provide tools for assessing such projects logically and rigorously. In addition to readings and films, the course includes assignments designed to strengthen a range of skills, particularly in logical argumentation. For example, the 'Thinking with AI' project encourages students to identify gaps and inaccuracies in AI-generated content, fostering more critical evaluation of such information. Finally, the oral history midterm exam aims to cultivate an empathetic vision of the past while also teaching students to critically analyze oral history accounts as sources for interpreting history.*

ELO 1.2 Engage in an advanced, in-depth, scholarly exploration of the topic or ideas within this theme.

> *The course draws on a wide range of sources, scholarship, and artworks—both historical and contemporary. Its structure is divided into three main components: Homework. Students will familiarize themselves with multimodal sources assigned for class. These materials are designed not only to provide information about events and their cultural and political contexts but also to spark curiosity, encouraging further exploration and the preparation of questions for class discussion. Lectures. Each lecture is structured as a 15-minute presentation followed by a 15-minute discussion in small groups and with the instructor. These sessions invite students to engage more deeply with primary sources as well as their interpretations across different intellectual traditions.*

Projects. Both collective and individual assignments—ranging from critical engagements with AI to oral history work to the analysis of visual and written sources—guide students in conducting independent, multimodal research on selected topics.
In conclusion, the course provides a platform for developing skills in the close analysis of multimodal sources, the interpretation of materials across intellectual traditions, and the cultivation of independent thinking on cutting-edge debates in sustainability studies, particularly as they relate to the history of nuclear energy.

ELO 2.2 Demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, building on prior experiences to respond to new and challenging contexts.

The history of nuclear energy and weaponry, situated within broad cultural and political contexts, has long provoked questions and debates across a wide spectrum of social groups in the United States and internationally. Against this backdrop, the course is structured in dialogue with central questions from sustainability studies. Through close analysis of diverse sources and the preparation of both individual and collective projects, students will be encouraged to formulate their own perspectives on key themes—such as social responsibility, risk, global governance, and environmental (in)justice —and to develop interpretations of the future of nuclear energy and weaponry, both in the post-Soviet context and globally. Especially the Oral History Project and the scaffolded final paper give students an opportunity to develop a sense of their relationship with questions of sustainability.

ELO 3.1 Describe elements of the fundamental dependence of humans on Earth and environmental systems and on the resilience of these systems.

Nuclear energy, as one of the major energy and military projects of the 20th century, has always been deeply dependent on environmental systems—from the rare earth elements mined in different parts of the world and transported to industrial plants, to the water that plays a crucial role in the technological infrastructure of nuclear facilities. At the same time, it continues to be regarded as a potential path toward clean energy, owing to its relatively low CO_2 emissions. Given this ambiguous position of nuclear energy in history, politics, and environmental debates, the course invites students to develop an independent and in-depth understanding of nuclear energy within the broader context of human–environment relations.
The Oral History Projects specifically adds the dimension of human perception of and interaction with questions of sustainability in a world shaped by nuclear technologies.

ELO 3.2 Describe, analyze and critique the roles and impacts of human activity and technology on both human society and the natural world, in the past, currently, and in the future.

As the course is centered on the development of nuclear energy and the construction and testing of nuclear devices, it reveals from the outset the profound human impact on the environment. Students will critically examine cases and debates surrounding the Chornobyl catastrophe, nuclear weapons testing, and society's growing dependence on energy—of which nuclear remains a major source. By bringing these discussions together, the course offers a more nuanced understanding of nuclear energy and its role in shaping domestic politics, national economies, and international relations. This broader perspective will encourage students to cultivate independent critical thinking about the interconnections between the natural world, technology, and human society.
Blog posts and take-home midterm assess this ELO, as they require students to synthesize and critique our course readings and lecture content with regard to issues of sustainability.

ELO 3.3 Devise informed and meaningful responses to problems and arguments in the area of sustainability based on the interpretation of appropriate evidence and an explicit statement of values.

Students will be trained to interpret nuclear history in dialogue with key concepts from sustainability studies. This dialogue will be further enriched by historical case studies from the Soviet Union and other countries, as well as by oral history accounts that students will collect from older friends and relatives. Through these exercises, students will gain a deeper understanding of the social, political, and environmental challenges surrounding nuclear energy, as well as its place in current debates on sustainable development.
This ELO is assessed in the final project, which prompts students to access their learning in the course to the future sustainability of nuclear technologies.