

ARCH 0110: DESIGN, RACE, AND CLIMATE JUSTICE

INSTRUCTOR

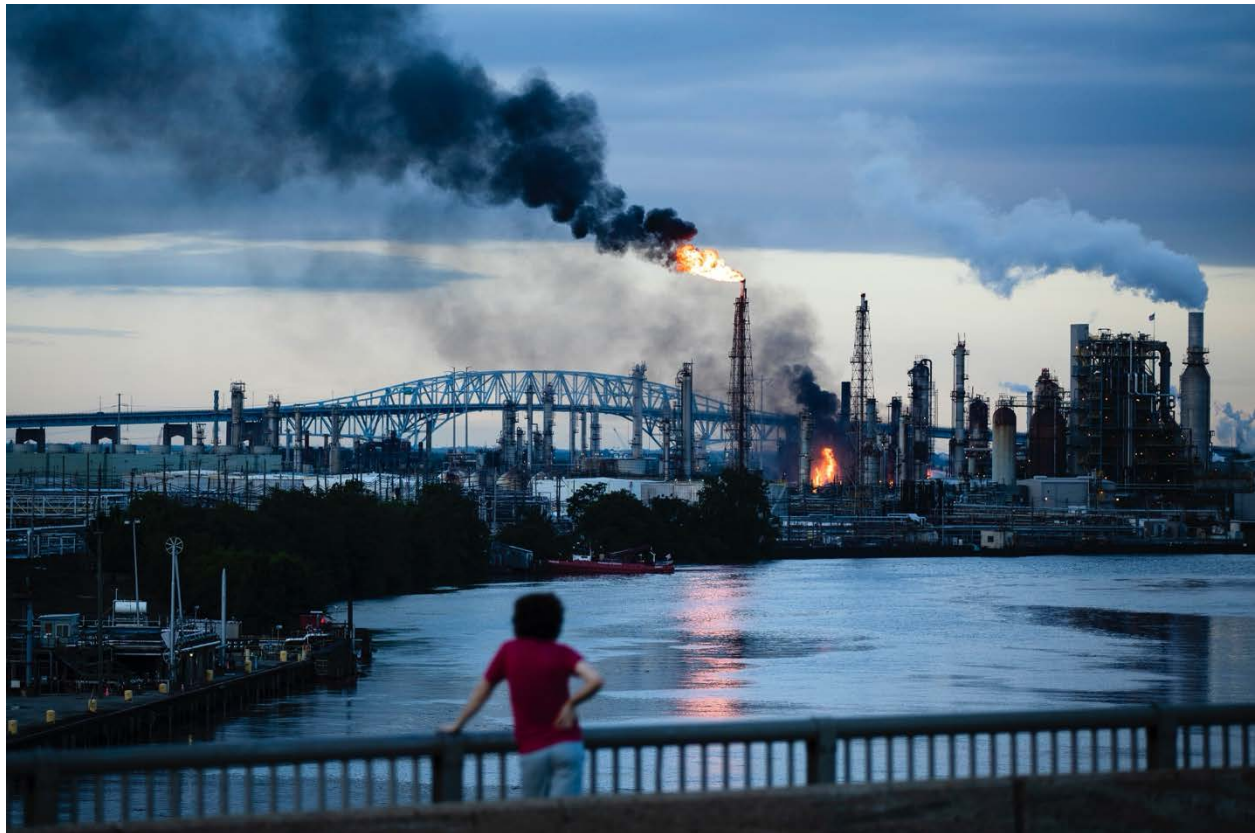
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Additional contact information will be shared with enrolled students.

COURSE UNITS and SCHEDULE

1 cu; Tuesdays and Thursdays 10:15 – 11:44am



An explosion at the Philadelphia Energy Solutions Refining Complex in June 2019 released toxic gases into the air threatening the health and wellbeing of nearby neighbors who were not notified of the risk. (Photo: Matt Rourke / AP, Source: Investigative Reporting Workshop, Accessed April 13, 2023)

COURSE DESCRIPTION

Through a critical and historical lens, students will examine material, spatial, and ecological practices in architecture and design that perpetuate racial inequities and exacerbate climate injustices. This course will challenge us to consider the ways in which design decisions negatively impact black, Indigenous, and other people of color while also causing harm to the environment. The extraction of raw materials for production often leads to the displacement of communities, the destruction of habitats and ecosystems, and the depletion of finite natural resources. Historically, urban planning and design have been used to enforce racial segregation and deny access to services and amenities to non-whites. The siting of toxic waste facilities, highways, and industrial zones in low-income communities of color has had devastating impacts on public health and quality of life. Probing the intersectional relationships between design, race, and climate change, we will engage with a range of texts, multimedia content, case studies, and hands-on projects. By the end of the semester, we will have a deeper understanding of the ways in which design impacts communities and the environment and be equipped with knowledge to advance a more just, equitable, and resilient future.

COURSE LEARNING OBJECTIVES

- Analyze the ways in which design impacts communities and the environment, with a focus on the intersection of racial inequity and climate justice.
- Identify the challenges and opportunities inherent in designing for justice and considering alternative approaches to promote racial and environmental justice.
- Develop critical thinking and problem-solving skills through the application of theoretical knowledge to contemporary real-world contexts.
- Engage in productive dialogue with peers and instructors, demonstrating an ability to listen actively, reflect on different perspectives, and respond respectfully.
- Develop an understanding of the historical and cultural context of architecture and design practices, and identify key trends and movements related to social and environmental justice.
- Demonstrate effective communication skills, including the ability to articulate complex ideas and arguments in written and oral formats.
- Critically evaluate sources of information and media related to design and racial justice.

GENERAL EDUCATION CURRICULUM

ARCH 0110 fulfills the College's General Education requirement for Cultural Diversity in the U.S. that "aims to develop students' knowledge of the history, dynamic cultural systems and heterogeneous populations that make up the national culture of the United States." It also can be used to satisfy Sector IV: Humanities and Social Science, which includes courses that integrate methods and approaches from multiple disciplines within the humanities and social sciences, allowing students to explore topics more deeply than in single-discipline courses.

Foundational Approach: Cultural Diversity in the U.S.

Focusing on the role of design in perpetuating racial inequities and climate injustices, this course examines how architecture and design practices perpetuate social inequities between racial groups, while also considering intersections with social class, immigrant status, gender identity, and sexual orientation. Through case studies and critical analysis of texts and multimedia sources, it recognizes that design decisions are not neutral but rather shaped by power dynamics and social hierarchies.

Sector IV: Humanities and Social Science

This course provides students with a rich and multidisciplinary understanding of the complex and interrelated issues that must be addressed in justice-oriented design work. It integrates approaches from multiple humanities and social science disciplines as follows:

- **History:** The course explores historical perspectives on architecture, design, and social and environmental justice movements, helping students understand the broader social and cultural contexts in which design operates.
- **Sociology:** The course examines how inequality, stratification, and power shape design decisions and outcomes, providing a nuanced understanding of how design can either perpetuate or challenge inequality.
- **Environmental Studies:** The course focuses on the environmental impacts of design, including materials, building systems, and transportation, offering a holistic view of how design affects the natural world and contributes to climate change.
- **Cultural Studies:** The course investigates how design reflects and influences cultural values and identities, highlighting its role in either reinforcing or challenging cultural stereotypes and power dynamics.

It places creative practices in design within an interpretive context by encouraging students to think critically about the role of design in shaping culture and identity. Students will examine the visual and spatial dimensions of design practice, considering how architecture, urban planning, material, and product design contribute to the construction of social and cultural meanings. They will explore questions of aesthetics and examine how creative practices intersect with social and environmental issues. The course will encourage students to think more critically about the role of design in shaping culture and identity and to consider how these practices can be harnessed to promote social and environmental justice.

STUDENT EVALUATION AND ASSIGNMENTS

This seminar will include a range of assignments and activities to support the course's learning objectives. The instructor will determine the final grades as per the information below.

Roundtable Discussions and Reading Reflection assignments 35%

Our Roundtable Discussions will center on various topics, encouraging in-depth group dialogue during class. To prepare, you will complete the assigned readings and view any multimedia content provided through "Course Materials @ Penn Libraries" on Canvas. Additionally, you are required to submit a reading reflection on Canvas, typically due 48 hours before the in-class discussion.

Synthesizing Discussions Facilitation 10%

We will engage in three Synthesizing Discussions that bring together critical insights from the roundtable discussions. These sessions are designed to help us identify and explore the intersections between the weekly roundtable topics. Students will work in groups to produce a summarizing presentation of the most significant observations from the previous weeks' discussions. Additionally, we will integrate insights from supplementary readings across our weekly topics. Each student will facilitate one Synthesizing Discussion during the semester.

Climate Justice Headlines assignments and in-class exercises 10%

Students will identify local, national, and global case studies demonstrating how design influences humans, societies, and the natural world. Students should focus on stories about how power dynamics and social hierarchies influence decision-making. This assignment will explore the impact of design practices on human and nonhuman forms of life and the ecosystems that sustain them. Students will discuss the Climate Justice Headlines in class and use these topic areas to select the focus of their final projects.

Final Project 35%

This group project aims to explore the complex and urgent issue of climate justice by analyzing case studies from the Climate Justice Headlines assignment. This project aims to deepen students' understanding of climate justice, its implications, and potential solutions while developing their creative visual and narrative communication skills. The final projects will combine both graphic and narrative elements. Students will work in teams to produce a visual and narrative final project that explores a case study related to climate justice. Format options will be shared with registered students.

<i>Proposal and draft submission</i>	5%
<i>Final presentation</i>	10%
<i>Final submission</i>	20%

Class participation and engagement 10%

Active class participation and engagement in discussions, activities, and group work will enhance the academic community of the course and your learning. Students are encouraged to approach the course material with a thoughtful and inquisitive mindset while also upholding the principles of the Group Agreement that will be established at the start of the semester.

Total 100%

LATE WORK

Late work will be penalized by a reduction of one letter grade per day and will not be accepted after three days. Students with concerns about their ability to meet course deadlines should contact the instructor immediately.

ACADEMIC INTEGRITY

Since the University is an academic community, its fundamental purpose is to pursue knowledge. Essential to the success of this educational mission is a commitment to the principles of academic integrity. Every member of the University community is responsible for upholding the highest standards of honesty at all times. Students, as members of the community, are also responsible for adhering to the principles and spirit of the Code of Academic Integrity as

published in the University of Pennsylvania Penn Book, <https://catalog.upenn.edu/pennbook/code-of-academic-integrity/>.

GRADING

Grading in all undergraduate architecture courses is consistent with the [Grading System of the College of Arts & Sciences](#). As noted in the charts below, grades range from A+ to F, with no D-.

The following 100-point grading scale will be used:

A+ 97 and higher	B+ 87 – 89	C+ 77 – 79	D+ 67 – 69	F 59 and lower
A 93 – 96	B 83 – 86	C 73 – 76	D 60 – 66	
A- 90 – 92	B- 80 – 82	C- 70 – 72		

The numeric value of each letter grade used to calculate a student's GPA is determined by the College of Arts & Sciences. See Grade Point Average <https://www.college.upenn.edu/index.php/grade-point-average>.

A+ 4.0	B+ 3.3	C+ 2.3	D+ 1.3	F 0.0
A 4.0	B 3.0	C 2.0	D 1.0	
A- 3.7	B- 2.7	C- 1.7		

USE OF AI-ASSISTED SOFTWARE ⁱ

While AI-assisted software can offer valuable assistance, it will never replace the nuanced perspectives and contributions of our diverse, talented, and creative student body. In this class, AI tools, such as ChatGPT and others, may serve as a digital resource to help answer questions, provide additional insights, and gather information. However, any AI-generated content should be regarded as a starting point rather than a final product. Please adhere to the following guidelines for using AI-assisted technology in this class.

- While AI can offer suggestions, students are expected to engage in original analysis and synthesis of the material. The final work should reflect your independent thought, critical thinking, and personal understanding of the subject.
- AI-generated content may include inaccurate and out-of-date information. As such, AI chatbots are not a reliable source and should not be included in a bibliography or list of references. Students are required to independently verify any information obtained from AI and cross-reference it with reliable sources. Students are responsible for the accuracy of any information that they submit in their work.
- When utilizing AI-generated content or suggestions, students should transparently disclose its use in their work. This applies to written assignments and presentations where AI-contributed insights were incorporated. As AI-generated content cannot be verified by others, it should be treated as personal communication rather than a verifiable source. Students should cite AI sources using footnotes, endnotes, or parenthetical citations. Refer to this reference for additional guidance on how to cite AI-generated content in your work using the Chicago Manual of Style: <https://www.grammarly.com/blog/ai-citations-chicago/>.
- Students are responsible for ensuring that their use of AI-assisted software aligns with the principles of academic integrity. Plagiarism or submitting work that does not accurately reflect one's own understanding is unacceptable.

If you have questions about the appropriate use of AI or need guidance on distinguishing your own work from AI-generated content, please contact the instructor.

ATTENDANCE AND LATENESS

Students are expected to attend all classes for the entire scheduled meeting time and are responsible for completing all assignments and for knowing the material covered in class. Students are responsible for work missed, regardless of reason for absence.

Religious Holidays

In accordance with university policy, students who observe religious holidays are excused from classes—including pin-ups and reviews—on designated holidays. Instructors are required to provide reasonable opportunities for a student to make up work missed by observing a religious holiday. See Policy on Secular and Religious Holidays: <https://catalog.upenn.edu/pennbook/secular-religious-holidays/>.

Illness and Emergencies

Absences for reasons other than observance of religious holidays may be excused in the event of an emergency, serious illness, or other extenuating circumstances. The decision to excuse such absences will be made by the instructor. Official documentation of illness or other emergencies may be required.

Course Action Notices

If absent from class for any reason, students must submit a Course Action Notice (CAN). Students report an absence by logging into Path@Penn and selecting the Course Action Notices option from the “My Courses” menu. Instructors must maintain a record of student attendance for the entire semester and monitor the submission of CANs by students for each absence.

Long-term Absences

While all absences from class should be documented by the student with a Course Action Notice, students must also meet with the Undergraduate Chair and a College Contact to discuss the academic implications of long-term absences that extend beyond two weeks. Prolonged absence from class, even if excused, will undoubtedly and negatively impact student performance.

Lateness

Instructors are encouraged to submit CANs for excessive lateness, as this may impact academic performance.

Automatic Grade Reductions for Unexcused Absences

Students are allowed one unexcused absence without a final course grade reduction. With each additional unexcused absence, a student's final course grade will be reduced one grade level for each additional absence. For example, after the second unexcused absence the final earned course grade of B+ will be lowered to a B; after the third unexcused absence from a B to B-; etc.).

An exception to an automatic grade reduction for unexcused absences can only be granted in writing by the Undergraduate Chair. Students seeking an exception to an automatic grade reduction must make an appointment to meet with the Undergraduate Chair after the final exam period and bring a copy of the CAN for each absence under consideration. Any additional documentation for an exception to the automatic grade reduction, if requested by the Undergraduate Chair, may be shared with the student's College Contact.

STUDENT SUPPORT SERVICES

The Weingarten Center offers a variety of resources to support all Penn students in reaching their academic goals. All services are free and confidential. To contact the Weingarten Center, call 215-573-9235. The office is located in Hamilton Village at 220 S. 40th Street, Suite 260.

Academic Support

Learning consultations and learning strategies workshops support students in developing more efficient and effective study skills and learning strategies. Learning specialists work with students to address time and project management, academic reading and writing, note-taking, problem-solving, exam preparation, test-taking, self-regulation, and flexibility.

Students can take advantage of free on-campus tutoring for many Penn courses in both drop-in and weekly contract format. Tutoring may be individual or in small groups. Tutors will assist with applying course information, understanding key concepts, and developing course-specific strategies. Tutoring support is available throughout the term but is best accessed early in the semester. First-time users must meet with a staff member; returning users may submit their requests online.

Disability Services

The University of Pennsylvania provides reasonable accommodations to students with disabilities who have self-identified and received approval from Disability Services. Students can contact Disability Services and make appointments to discuss and/or request accommodations by calling 215-573-9235.

ACADEMIC POLICIES AND PROCEDURES

Students and faculty will adhere to the academic policies and procedures of the College of Arts and Sciences: <https://www.college.upenn.edu/policies>.

COURSE SCHEDULE

Wk	Topic
01	<p>Course Introduction; Discussion: What is race?</p> <p>Roundtable Discussion 01. Race and Climate Violence</p> <p>Article: "Without Centering Race, Identity, and Indigeneity, Climate Responses Miss the Mark." Wilson Center. September 30, 2020. <i>(Required)</i></p> <p>Book Chapter: Williams, Jeremy. "Climate Violence." In <i>Climate Change is Racist</i>, 77-87. London: Icon Books, 2021. <i>(Required)</i></p> <p>Documentary: Groome, Tracey. <i>Arrows against the Wind</i>. Reading, PA: Bullfrog Films, 1993. 52 minutes. <i>(Required)</i></p> <p>Book Chapter: Williams, Jeremy. "The Deep Roots of Climate Injustice." In <i>Climate Change is Racist</i>, 61-75. London: Icon Books, 2021. <i>(Recommended)</i></p>
02	<p>Climate Justice: Local Headlines Exercise</p> <p>Roundtable Discussion 02. Housing Segregation</p> <p>Documentary: <i>Jim Crow of the North: Redlining and Racism in Minnesota</i>, Twin Cities PBS, 2019, 57 minutes. <i>(Required)</i></p> <p>Article: Hillier, Amy E. "Redlining and the Home Owners' Loan Corporation." <i>Journal of urban history</i>. 29, no. 4 (2003): 394–420. <i>(Required)</i></p> <p>Article: Penner, Barbara. "Facts for Fair Housing." <i>Places Journal</i>, July 2022. Accessed August 19, 2024. <i>(Recommended)</i></p>
03	<p>Climate Justice: U.S. Headlines Exercise</p> <p>Roundtable Discussion 03. Heat and Health Disparities</p> <p>Article: Hoffman, Jeremy S., Vivek Shandas, and Nicholas Pendleton. 2020. "The Effects of Historical Housing Policies on Resident Exposure to Intra-Urban Heat: A Study of 108 US Urban Areas" <i>Climate</i> 8, no. 1: 12. <i>(Required)</i></p> <p>Documentary: Helfand, Judith. <i>Cooked: Survival by Zip Code</i>. Reading, PA: Bullfrog Films, 2020. 82 minutes. <i>(Required)</i></p>
04	<p>Climate Justice: Global Headlines Exercise; Final Project Assigned</p> <p>Synthesizing Discussion 01. Land, Power, and Culture</p> <p>Book Chapter: hooks, bell. <i>Black Vernacular: Architecture as Cultural Practice</i>. In <i>Art on My Mind: Visual Politics</i>, 145-151. New York: The New Press, 1995. <i>(Required)</i></p> <p>Article: Shepard, Cassim. "Land Power." <i>Places Journal</i>, July 2022. Accessed August 14, 2024. <i>(Required)</i></p> <p>Book Chapter: hooks, bell. <i>Architecture in Black Life: Talking Space with LaVerne Wells Bowie</i>. In <i>Art on My Mind: Visual Politics</i>, 152-162. New York: The New Press, 1995. <i>(Recommended)</i></p>
05	<p>*Visit to the Vitale Digital Media Lab</p> <p>Roundtable Discussion 04. Climate and Green Gentrification</p> <p>Podcast: WNYC Studios and KCRW. "Premium Elevation." Season 3, Episode 1. Hosted by Kai Wright, Nadege Green, and Christopher Johnson. Released November 5, 2019. 24 minutes. <i>(Required)</i></p> <p>Podcast: WNYC Studios and KCRW. "Buying into Black." Season 3, Episode 2. Hosted by Kai Wright, Nadege Green, and Christopher Johnson. Released November 6, 2019. 22 minutes. <i>(Required)</i></p> <p>Podcast: WNYC Studios and KCRW. "The Land Rush." Season 3, Episode 3. Hosted by Kai Wright and Nadege Green. Released November 7, 2019. 24 minutes. <i>(Required)</i></p> <p>Article: Gearin, Elizabeth, Kecia Dunson, and Melissa Hampton. "Greened Out: Mitigating the Impacts of Eco-Gentrification Through Community Dialogue." <i>Architecture MPS</i> 25, no. 1 (2023): 2. <i>(Required)</i></p> <p>*Class Field Trip</p>
06	<p>*Visit to the Fisher Fine Arts Library</p> <p>*Fall Break, No class</p>
07	<p>Final Project: Proposal Presentations (Peer Feedback)</p> <p>Roundtable Discussion 05. Water and Global Migration</p>

	Documentary: Nash, Michael P. <i>Climate Refugees</i> . San Francisco, CA: The Video Project, 2010. 86 minutes. (Required) Article: Májà-Pearce, Adéwálé. "'Nothing without Water'." <i>Places Journal</i> , October 2023. Accessed August 12, 2024. (Required)
08	Workshop: Leveraging AI and Data Visualization Tools Roundtable Discussion 06. Indigenous Wisdom and Climate Adaptation Documentary: <i>Inhabitants</i> . Directed by Anna Palmer and Costa Boutsikaris. Bayview Entertainment, 2021. 76 minutes. (Required) Article: Carr, Sara Jensen. "Water Is Wealth." <i>Places Journal</i> , October 2021. Accessed August 14, 2024. (Required)
09	Guest Lecture Synthesizing Discussion 02. Growth and Limits Article: Ross, Andrew. "Bird on Fire: Lessons from the World's Least Sustainable City." <i>Places Journal</i> , November 2011. Accessed August 14, 2024. (Required) Article: Holmes, Rob. "The Problem with Solutions." <i>Places Journal</i> , July 2020. Accessed August 14, 2024. https://doi.org/10.22269/200714 (Recommended)
10	Final Project: In-class working session Roundtable Discussion 07. Food Justice Podcast: "The Leading Voices in Food. E224: Mississippi Delta History Describe Food Power Against and For Blacks in US." Hosted by Norbert Wilson. Duke University, January 16, 2024. 20 minutes. (Required) Article: Hicks, Emily, and Melody R. Stein. "Wild Rice Waters." <i>Places Journal</i> , June 2021. Accessed August 19, 2024. (Required)
11	Guest Lecture Roundtable Discussion 08. Energy Justice Documentary: <i>Current Revolution: Nation in Transition</i> . American Resilience Project, 29 minutes. (Required) Article: Martin, Reinhold. "Abolish Oil." <i>Places Journal</i> , June 2020. Accessed August 14, 2024. (Required) Article: Iturbe, Elisa. "Architecture and the Death of Carbon Modernity." <i>Log</i> , no. 47, Overcoming Carbon Form (Fall 2019): 10-23. https://www.jstor.org/stable/10.2307/26835026 . (Recommended)
12	Final Project: In-class working session Roundtable Discussion 09: Material Impacts Documentary: <i>The Age of Aluminum</i> . Directed by Bert Ehgartner. Released January 1, 2013. 52 minutes. (Required) Documentary: New Media Advocacy Project. <i>Beneath the Surface: The Impacts of Mining</i> . YouTube video, 10 minutes. Released September 5, 2017. (Required) Article: Vasudevan, P. (2019). An intimate inventory of race and waste. <i>Antipode</i> , 53(3), 770–790. (Required) Article: Ockman, Joan. "Toward a Political Ecology of Architecture." <i>Places Journal</i> , March 2022. Accessed August 19, 2024. https://doi.org/10.22269/220315 . (Recommended)
13	Final Project: Draft 1 Presentations Synthesizing Discussion 03. Decolonizing Design Article: Barnett, Rod. "Utu in the Anthropocene." <i>Places Journal</i> , August 2021. Accessed August 19, 2024. (Required) Escobar, Arturo. <i>Designs for the Pluriverse: Radical Interdependence, Autonomy, and the Making of Worlds</i> . Durham: Duke University Press, 2018. Chapter 6, "Autonomous Design and the Politics of Relationality and the Communal." (Recommended)
14	Final Project: Group Meetings <i>Thanksgiving, No class</i>
15	Guest Lecture Final Project: Draft 2 Presentations (Peer Feedback)
16	<i>Reading Day, No class</i> Final Project: Presentations

Please Note:

- This is a sample syllabus provided for informational purposes only. Content such as the schedule, readings, assignments, and guest speakers are subject to change. The final, updated syllabus will be distributed to enrolled students at the beginning of the semester.

ⁱ *This AI policy was drafted using the August 3, 2023, Version of ChatGPT from OpenAI. I asked ChatGPT to draft an AI policy for the course that allows for supplemental use of AI but requires that the final output reflect students' understanding of the topic.*