**Cultures of Waste and Repair: (re)telling, (retro)fitting, (re)generating for a Just Transition**
ARCH 692: Thesis Research and Design I Studio
Instructor: Jane Mah Hutton (jane.hutton@uwaterloo.ca)
Tuesdays & Thursdays*: 9:30 AM-12:30 PM, 2:00-5:30 PM EST (*Thurs varies)
Office Hours: email for appointment

Blended In-Person/Online Format, Locations:
In-person meetings (for those who elect to be in Cambridge): Waterloo Architecture studio and 313
Online meetings: Teams
Studio Collaboration and Presentation Space: Studio Miro Board, on Teams
Reading uploads, Project Briefs, Schedules, Informal chatting: Teams
Official Project Submissions and Grades: Learn

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Image: Thames Beach, Greenwich, UK, 2013.

Key Words: *Discard Studies, broken world thinking, composting feminism, Right to Repair, deconstruction/demolition, material reuse, obsolescence, intangible heritage, regenerative land practices, reparations, ecological practices, circular economy, urban mining, curated decay,[1] open/closed systems, environmental and climate justice, care, maintenance, Just Transition*

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[1] See Susan Ross, "Heritage in Reverse: Material Values, Waste, and Deconstruction" Symposium Report, Oct 26-27, 2018. https://wasteheritageresearch.wordpress.com/symposium/

*…what happens when we take erosion, breakdown, and decay, rather than novelty, growth, and progress, as our starting points…? [Broken world thinking is]..an argument and provocation toward doing new and different kinds of research, and new and different kinds of politics…*

Steven J. Jackson, "Rethinking Repair," 2014[2]

*This task of generating alter-concepts of care and responsibility might proceed by calling forth alter-modes of collaboration and study that simultaneously aim at world-building and dismantlement.*

Michelle Murphy, "Alterlife and Decolonial Chemical Relations." 2017[3]

*The transformation of ecologies into many systems of circulation and accumulation to serve the few is the project of settler colonial infrastructure…We suggest that effective initiatives for justice, decolonization, and planetary survival must center infrastructure in their efforts, and we highlight <u>alimentary infrastructure</u>– infrastructure that is life-giving in its design.*

Winona LaDuke and Deborah Cowan, "Beyond Wiindigo Infrastructure," 2020[4]

*In many academic disciplines and professional practices — architecture, urban studies, labor history, development economics, and the information sciences, just to name a few — maintenance has taken on new resonance as a theoretical framework, an ethos, a methodology, and a political cause. This is an exciting area of inquiry precisely because the lines between scholarship and practice are blurred. To study maintenance is itself an act of maintenance. To fill in the gaps in this literature, to draw connections among different disciplines, is an act of repair or, simply, of taking care — connecting threads, mending holes, amplifying quiet voices.*

Shannon Mattern, "Maintenance and Care," 2017[5]

## DESCRIPTION

This Thesis and Design Research Studio supports M1 students to develop an independent thesis proposal through a series of iterative research, writing, modeling, and design exercises. We focus on *Cultures of Waste and Repair*, examining contemporary theories and practices which challenge linear, extractive systems that instrumentalize land and people as commodities that can be wasted. We'll study and engage with different efforts to recognize and transform harmful socio-ecological relationships that are encoded in global capitalism. What is architecture outside of the paradigm of "new construction"? Three phases of the semester focus on 1) *(re)telling* – or examining the waste paradigms of contemporary capitalism by focusing on single emblematic narratives, 2) *(retro)fitting*

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[2] Steven J. Jackson, "Rethinking Repair," in Tarleton Gillespie, Pablo J. Boczkowski, and Kirsten A. Foot, eds. *Media Technologies: Essays on Communication, Materiality, and Society*, (Cambridge: MIT Press, 2014).

[3] Michelle Murphy, "Alterlife and Decolonial Chemical Relations." Cultural Anthropology 32, no. 4: 494–503, 2017. https://doi.org/10.14506/ca32.4.02

[4] Winona Laduke and Deborah Cowen, "Beyond Wiindigo Infrastructure," *South Atlantic Quarterly,* 119:2, April 2020, pp. 243-268.

[5] Shannon Mattern, "Maintenance and Care," *Places Journal,* Nov. 2018,

– exploring constructions materials and their lives and "alterlives"[6], and 3) *(re)generation* – rebuilding ecosystem relationships within a Just Transition. Through these lenses, students will explore these topics through different scales (objects, buildings, landscapes, ecosystems) and different media (2D, 3D, 4D) as they move towards framing their Master of Architecture thesis proposal. The studio's subtitle concepts will cycle through the readings, project foci, and three phases of this exploratory thesis semester:

**Phase 1: (Re)telling: Waste Stories and Repair Practice.** The first phase of the semester will be dedicated to considering concepts and manifestations of waste crises and ecocide. We'll start by identifying intense and compelling stories that crystallize global realities of waste – broadly defined. These stories will be an entry point into a complex set of ideas, texts, resources, that will serve as an introduction to the topic. At the same time, everyone in the class will take on a personal repair project to gain hands-on experience in a physical act of repair, convenient to their own situations. This early phase of the semester is about gathering resources, looking extensively and intensively at your topic and asking, what has contributed to the problem that you're studying?

**Phase 2: (Retro)fitting: Approaches to Repair.** The second phase of the semester focuses more directly on the scale of constructions (whether buildings or designed landscapes), and investigates material life cycles, demolition, and deconstruction. Everyone will identify and examine precedents or models of cultures of repair relevant to their own topics. The project will focus on physical modeling as a form of exploring ideas and practices in three dimensions. This middle part of the semester is about developing questions for your own research and identifying methods to engage those questions.

**Phase 3: (Re)generating: Ecological Practices in a Just Transition** refers to the potential of material and ecological practices that support many forms of life and ways of being. What are land-based examples and practices of ecological care and repair? This final stage of the semester will focus on action and practice – testing out the research methods that you've identified. The project will focus on video/film or time-based media. By cycling through these concepts, the group will engage in iterative design, research, and writing projects that ultimately lead to a thesis proposal at the end of term.

**Writing:** Each phase will include short, iterative writing exercises which will be the basis of a Thesis Proposal by the end of the term.

## LEARNING OBJECTIVES

The primary objective of this studio is to support you to develop a clear and provocative thesis question, establish specifically *how* you will engage design and its modes of representation to approach this question, and build a base of theoretical, site, and other resources to draw from during the process. More than a discrete problem-solving design exercise, thesis involves a critical engagement within and beyond the discipline of architecture. It challenges you to position a project within contemporary discourses in the field as well as to speculate about your project's relevance and role in the world at large. Specifically, the learning objectives for this studio include:

1. Developing a thesis question through an engagement with design discourse and broader cultural, political, or ecological contexts;
2. Establishing a specific design research method and approach to address this question;
3. Researching and analyzing precedents, modes of design, site contexts, and theories that support your work;
4. Developing an iterative working method that integrates design, research, and writing as a productive feedback system; and

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[6] See Murphy, 2017.

5.  Iterative and speculative design work through various forms of representation.

## REPAIR + LAND

This semester, our studio members are both in Cambridge and dispersed. But 7 Melville Street South (where some will be gathering) is located on the edge of the Grand River which was the centre line for the Haldimand Tract, a 900,000 acre parcel laid out by the Crown in 1784, and promised to the Haudenosaunee of the Six Nations (Mohawk, Oneida, Onondaga, Cayuga, Seneca, and Tuscarora) for their sole use forever.[7] Within forty years, the crown expropriated and sold off nearly 90 percent of the original tract, with negligible benefit to its Haudenosaunee landholders. Today, large urban centres of Kitchener-Waterloo and Cambridge and the University of Waterloo occupy this land. Six Nations is the largest populated First Nation in Canada and the Six Nations Elected Council is in active litigation requesting the accounting of assets owed to the council by the Crown. In April of 2021, the Haudenosaunee Confederacy Chiefs Council called for a Moratorium on Development in the Haldimand Tract, pending consultation with the Haudenosaunee Development Institute (HDI). Many topics that we'll be discussing in this studio are tied to Indigenous land dispossession and systemic environmental injustices; an aim of this studio is to make these ongoing relations a central concern rather than "externalities" of architecture, and to speculate about what actions can be taken in solidarity with these struggles.

***Reading Seminars 1-4 and reflections.*** To establish some shared ground for the studio, we have four Reading Seminars in the first five weeks of the term around the course subtitle topics. Each week there are three or four readings; skim all of them and then select <u>two to read closely</u>. For each of these seminars write a very short (1-2 paragraphs) reflection making links between the two texts, and post before class on the Teams "Studio Discussion" channel right before class. These reflections are not graded (just yes/no) and are meant to help establish an informal and regular practice of reading/writing. Everyone will sign up to lead a 30-40 minute discussion about one of the texts. Groups can coordinate how they would like to arrange these discussions, but each leader should provide approximately 10 minutes to introduce the text, its primary arguments, writing approach, and connections to the themes of the studio, and then facilitate a discussion on those themes (Miro can be a helpful tool).

***Student-led Seminars 1-4.*** As your topics gel and affinities between different students emerge, we'll have four student-led seminars. Each group will develop together and lead a seminar, selecting one text to share ahead of time with the class, that resonates with their own research but can also be helpful to the group as a whole. The group will lead a discussion on the reading but can also facilitate any form of activity/workshop that helps the class to engage the topics of the reading.

***Final Submission.*** The final requirement for the studio is the submission of a compiled and edited Thesis Proposal document and a digital folio containing carefully documented work from Projects 1, 2, and 3, including revisions based on comments from the final review.

|                                                   | %    |
| ------------------------------------------------- | ---- |
| Seminar Reading/Writing + Participation           | 20%  |
| Project 1                                         | 25%  |
| Project 2                                         | 25%  |
| Project 3 + Final Thesis Folio + Thesis Proposal  | 30%  |

***Late Work.*** Only in the case of a justified medical or personal reason will these penalties be waived, and only if these have been officially submitted to and accepted by the Graduate Office. Students seeking accommodations due to COVID-19, are to follow Covid-19-related accommodations as

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[7] See Six Nations Council, *Six Miles Deep: Land Rights of the Six Nations of the Grand River*, 2015, http://www.sixnations.ca/SixMilesDeepBooklet2015Final.pdf

outlined by the university here: ([https://uwaterloo.ca/coronavirus/academic-information#accommodations](https://uwaterloo.ca/coronavirus/academic-information#accommodations)).

Note: a passing grade of 65% for the Final Project is required to pass ARCH692.

## STRUCTURE, STUDIO CULTURE, & THE ONLINE SEMESTER

The studio will be offered in a hybrid-model; students will have chosen whether they're going to be using a studio space in the school and attending in-person classes as they are offered. The studio schedule involves synchronous meeting types (individual, small group, and whole group) and reading seminars. The schedule shows two formats "hybrid" and "online". "Hybrid" means that I will physically be in Cambridge and will meet with students (who are there) in person, and (for those taking the studio remotely) online. "Online" means that our meetings will be online, and everyone, regardless of location will be meeting via Teams. In general, Tuesdays are focused on meetings (hybrid), and Thursdays are focused on seminars and group discussions (online). In the first half of the semester, these seminars will be used to discuss required readings that focus the studio's larger framework that I have curated. In the second half of the semester, these seminars will focus on readings and topics driven by student thesis topics. Several Thursday afternoons sessions will be spent working offline: these are flexible formats that might involve everyone working offline on a particular task and then posting it at the end of the afternoon. The aim is to make a positive experience for everyone, regardless of location. Once we have the studio group established and know more about everyone's locations, we'll have the opportunity to discuss and adjust format as works best.

School, thesis, independent research can all be demanding and isolating on their own; but our current situation makes that even more difficult for everyone. One approach that I have seen work very well for some students is to treat it like a job with set hours, do what you can within them and use those limits to practice making decisions that prioritize what matters most to you, and to make sure that you reserve energy and time for yourself outside of school. We have 13 hours of scheduled studio hours, and generally we will be meeting for 3-hour seminars each week, and likely around 1-3 hours of additional meetings per week. That gives you seven hours to work independently *within* studio hours, and then decide how many additional hours you want to dedicate given your other demands; if it helps, keep a time sheet. Open offline time, walking outside, connecting with loved ones, taking time to yourself are all important for well-being. I will respect the stated meeting times and class hours. Everyone is different, but I have a hard time being on a screen all day, I need to get up, go outside, and run around to function. I am trying to carve out 30-minute breaks each session for myself because I know that meeting on-line for several hours in a row will be physically difficult for me. And similarly, I ask that you let me know if there are adjustments that I can make to support you.

We are going to be working together and discussing challenging topics, and it is important that the studio is a place where we are respectful of each other and our different experiences and identities. The online format adds more difficulty to the situation, it is challenging to read body language and sense when others feel uncomfortable. At the bottom of this syllabus is an official statement from the school about equity, diversity, and inclusion and pathways to communicating problems or grievances. I also want to say here that I thank you in advance for correcting me or approaching me if I say/do something that makes you uncomfortable, or if there are specific issues you think are important that we discuss within the context of the course.

## SCHEDULE

| | | | | | |
|---|---|---|---|---|---|
| WK1 | 6 SEPT. | 7 SEPT | 8<br>Semester<br>Begins | 9 [online]<br>***P1 (Re)Telling: Waste Stories Intro***<br>AM/PM: Introductions; Workspaces | 10 |
| WK2 | 13 | 14 [hybrid: in-person/online]<br>AM/PM: Small Group Meetings | 15 *Yom Kippur* | 16 [online] *Yom Kippur*<br>AM: Reading Seminar 1<br>PM: Individual Meetings | 17 |
| WK3 | 20 | 21 [hybrid: in-person/online]<br>***P1a Interim***<br>AM/PM: Presentation / Discussion | 22 | 23 [online]<br>AM: Reading Seminar 2<br>PM: Offline Focus Session | 24 |
| WK4 | 27 | 28 [hybrid: in-person/online]<br>AM/PM: Individual Meetings | 29 | 30 [online] *Day of Truth and Reconcil.*<br>AM: Reading Seminar 3<br>PM: Offline Focus Session | 1 OCT. |
| WK5 | 4 | 5 [hybrid: in-person/online]<br>AM/PM: Small Group Meetings | 6 | 7 [online] ***P1a/b Due***<br>AM/PM: Presentation / Discussion | 8 |
| WK6 | 11 | 12<br>**READING WEEK –** | 13<br>**NO CLASSES** | 14 | 15 |
| WK7 | 18 | 19 [hybrid: in-person/online]<br>*Build Reuse Conference*<br>***P2 (Retro)fitting: Approaches to Repair***<br>AM/PM: Small Group Meetings | 20<br>*Build Reuse Conference* | 21 [online]<br>AM: Reading Seminar 4<br>PM: Individual Meetings<br>*Build Reuse Conference* | 22 |
| WK8 | 25 | 26 [hybrid: in-person/online]<br>AM/PM: Cross-TRD1 Studio Event | 27 | 28 [hybrid: in-person/online]<br>AM/PM: Small Group Meetings | 29 |
| WK9 | 1 NOV. | 2 [online]<br>AM/PM: Individual Meetings | 3 | 4 [hybrid: in-person/online] *Diwali*<br>AM/PM: Small Group Meetings | 5 |
| WK10 | 8 | 9 [hybrid: in-person/online]<br>***P2 Due***<br>AM/PM: Presentation / Discussion | 10 | 11 [online]<br>AM: ***P3 (Re)generating: Ecosystems***<br>Student-led Seminar 1<br>PM: Offline Focus Session | 12 |
| WK11 | 15 | 16 [hybrid: in-person/online]<br>AM/PM: Individual Meetings | 17 | 18 [online]<br>AM: Student-led Seminar 2<br>PM: Small Group Meetings | 19 |
| WK12 | 22 | 23 [hybrid: in-person/online]<br>AM/PM: Small Group Meetings | 24 | 25 [online]<br>AM/PM: Individual Meetings<br>AM: Student-led Seminar 3<br>PM: Offline Focus Session | 26 |
| WK13 | 29 | 30 [hybrid: in-person/online]<br>AM/PM: Individual Meetings | 1 DEC. | 2 [online]<br>AM: Student-led Seminar 4<br>PM: Small Group Meetings | 3 |
| WK14 | 6 | 7 [hybrid: in-person/online]<br>AM/PM: Individual Meetings | 8<br>P3 due 10 PM. | 9<br>***Final Review w/guests (TBD)*** | 10<br>***Final Review*** |
| WK15 | 13 | 14 | 15 | 16<br>Final Studio Folio and Thesis Proposal Upload | 18 |

**READING SEMINARS & RESOURCE LIST**

(All Required Readings and many Suggested Readings will be posted in the course Teams site)

*Reading Seminar 1: (Re)Telling – Waste Histories*

1. Michelle Murphy, "Alterlife and Decolonial Chemical Relations." Cultural Anthropology 32, no. 4: 494–503, 2017. https://doi.org/10.14506/ca32.4.02
2. Max Liboiron, "How Plastic is a Function of Colonialism." *Teen Vogue,* 2018*, 3 p.*
3. Jason W. Moore, "The Capitalocene, Part I: On the nature and origins of our ecological crisis," *The Journal of Peasant Studies*, 2017, 44:3, 594-630.
4. Jane Hutton, "Inexhaustible Terrain: Guano from the Chincha Islands, Peru to Central Park, 1862," in *Reciprocal Landscapes: Stories of Material Movements,* Routledge, 2019, pp. 26-55

*Suggested*

Paola Rosa-Aquino, "Fix or Toss? The 'Right to Repair' Movement Gains Ground," *New York Times,* Oct. 23, 2020. https://www.nytimes.com/2020/10/23/climate/right-to-repair.html

Steven J. Jackson, "Rethinking Repair," in Tarleton Gillespie, Pablo J. Boczkowski, and Kirsten A. Foot, eds. *Media Technologies: Essays on Communication, Materiality, and Society*, (Cambridge: MIT Press, 2014). *[keyword: Broken World Thinking]*

Senseable Cities Lab, Trash / Track, http://senseable.mit.edu/trashtrack/

Max Liboiron, *Pollution is Colonialism*. Durham, NC: Duke University Press, 2021.

Stephanie Foote, Elizabeth Mazzolini (eds), Histories of the Dustheap: Waste, Material Cultures, Social Justice, available online through UWaterloo Library System.

Samantha Macbride, *Recycling Reconsidered: The Present Failure and Future Promise of Environmental Action in the United States*. MIT Press, 2012.

Max Liboiron, "Modern Waste as Strategy." *Lo Squaderno: Explorations in Space and Society*, no. 29 (2013): 9–12.

Douglas, Mary. *Purity and Danger: An Analysis of Concepts of Pollution and Taboo*. London: Routledge & K. Paul, 1966.

Jane Bennett, 2010, "The Force of Things", "The Agency of Assemblages", in *Vibrant Matter: A Political Ecology of Things*, (Durham: Duke University Press) pp. 1-38.

Vaclav Smil, "What Matters Most," in *Making the Modern World: Materials and Dematerialization,* John Wiley and Sons, 2014, pp. 45-75.

Kiel Moe, "A Material History of Insulation in Modernity, (excerpt)" in *Insulating Modernism: Isolated and Non-Isolated Thermodynamics in Architecture,* Birkhauser, pp. 127-169.

*Reading Seminar 2: (Retro)Fitting, Deconstructing, Demolishing*

1. Daniel M. Abramson, *Obsolescence,* University of Chicago Press, 2016, 208 pp. (selections)
2. Jenny Foster and Heidy Schopf, "Mineral Migration: Extracting, Recomposing, Demolishing, and Recolonizing Toronto's Landscape," in *Landscript 5: Material Culture,* Jane Hutton (ed), Jovis Verlag: Berlin, 2017, pp. 47-63.
3. Lionel Devlieger, "Reverse Architecture – the Virtues of Unbuilding and Reassembling," in *Tabula Scripta.* Pp. 147-152

4.  Josh Lepawsky, Max Liboion, Arn Keeling, Charles Mather, "Repair-scapes", *continent, Issue 6.1, 2017.*

<u>*Suggested*</u>

Alison Creba, "Demolition and deconstruction legacies: Toronto's Honest Ed's and Mirvish Village," Journal of Cultural Heritage Management and Sustainable Development, Vol 10, no 1, 2020, pp. 52-64.

Susan M. Ross, "Re-Evaluating Heritage Waste: Sustaining Material Values through Deconstruction and Reuse", *The Historic Environment: Policy and Practice,* 2020 Vol. 11, No 2-3, 382-408.

Mark Gorgolewski, "Designing with reused building components: Some challenges," *Building Research & Information,* 2008, 36(2): 175-188.

Jana Cephas, "Picturing Modernity: Race, Labor, and Landscape Production in the Old South" in Jane Hutton (Ed) *Landscript 5: Material Culture: Assembling and Disassembling Landscapes,* Jovis: Berlin, 2017pp. 125-144.

Susan Ross, "A Bibliography on Demolition Waste and Deconstruction," *Discard Studies,* November 27, 2017. https://discardstudies.com/2017/11/27/a-bibliography-on-demolition-waste-and-deconstruction/

Martin Hogue, "Matter: Displaced, Organized, Flattened," in *Landscript 5: Material Culture,* Jane Hutton (ed), Jovis Verlag: Berlin, 2017.

Building Materials Re-Use Association (BMRA). (2014). *Introduction to Deconstruction: A Comprehensive Training Workbook.*

### <u>*Reading Seminar 3: (Re)generating*</u>

1.  Anna Lowenhaupt Tsing, "The arts of noticing", "Contamination as Collaboration", "Some Problems with Scale", *The Mushroom at the End of the World: On the possibility of life in capitalist ruins,* Princeton University Press: New Jersey, 2015, pp. 17-43.
2.  Winona Laduke and Deborah Cowen, "Beyond Wiindigo Infrastructure," *South Atlantic Quarterly,* 119:2, April 2020, pp. 243-268.
3.  Shannon Mattern, "Maintenance and Care," *Places Journal,* Nov. 2018, *https://placesjournal.org/article/maintenance-and-care/?cn-reloaded=1*

<u>*Suggested*</u>

Donna Haraway, "Tentacular Thinking: Anthropocene, Capitalocene, Chthulucene", (excerpt) https://www.e-flux.com/journal/75/67125/tentacular-thinking-anthropocene-capitalocene-chthulucene/

*Feral Atlas and the More-than-Human Anthropocene* https://feralatlas.supdigital.org/index?text=feral-atlas-and-the-more-than-human-anthropocene&ttype=essay&cd=true

Maria Puig de la Bellacasa, *Matters of Care: Speculative Ethics in More than Human Worlds,* Minnesota Press, 2017.

Anna Lowenhaupt Tsing, 2005. "A History of Weediness", in *Friction: An Ethnography of Global Connection,* (Princeton: Princeton University Press), pp. 171-212.

Leanne Betasamosake Simpson, "Land as Pedagogy: Nishnaabeg intelligence and rebellious transformation," Decolonization: Indigeneity, Education & Society, Vol. 3, No. 3, 2014, pp. 1-25.

Eve Tuck and K. Wayne Yang, "Decolonization is not a metaphor," *Decolonization: Indigeneity, Education & Society,* Vol. 1, No. 1, 2012, p. 1-40

***Reading Seminar 4: Just Transitions***

1. Kate Aronoff, "With a Green New Deal, Here's What the World Could Look Like," *The Intercept,* December 5, 2019.
2. *The Red Nation, The Red Deal: Indigenous Action to Save our Earth*, excerpts. Verso, 2021.
3. Linda Tuihiwai Smith, "Introduction,""Research through Imperial Eyes," *Decolonizing Methodologies – Research and indigenous peoples,* Zed Books, 1999. Pp. 1-19, 44-59

*Suggested*

The Care Collective, *The Care Manifesto: The Politics of Interdepedence,* Verso, 2020.

Andreas Malm. "A Return to the Flow? Obstacles to the Transition," *Fossil Capital,* London: Verso 2016. 367-388.

Kyle P. Whyte. "Indigenous Science (Fiction) for the Anthropocene: Ancestral Dystopias and Fantasies of Climate Change Crises," *Environment & Planning E: Nature and Space* 1 (1-2): 224-242. 2018.

Erik Swyngedouw, 2003."Metabolic Urbanization: the Making of Cyborg cities." in, Swyngedouw, Erik, Heynen, Nik, and Kaika, Maria (Eds), *The Nature of Cities: Urban Political Ecology and the Politics of Urban Metabolism*, (New York: Routledge), p. 21-40.

Deconstruction / Material Flows

Bill Addis, *Building with Reclaimed Components and Materials: A Design Handbook for Reuse and Recycling*.

Discard Studies, https://discardstudies.com/about/

Composting Feminisms, https://compostingfeminisms.wordpress.com/

Mark Gorgolewski, *Resource Salvation: The Architecture of Reuse,* Wiley, 2018.

Sally Stone, *UnDoing Buildings: Adaptive reuse and cultural memory,* Routledge: New York, 2020.

Jeff Byles, *Rubble: Unearthing the History of Demolition,* Three Rivers Press: New York, 2005.

A. Laurie Palmer, *In the Aura of a Hole: Exploring Sites of material extraction,* Black Dog Publishing.

Lucy Lippard, *Undermining: A wild ride through land use, politics, and art in the changing west,* The New Press: New York, 2014.

Land Practices / Climate Change / Environmental History

Robin Wall Kimmerer, *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teachings of Plants,* Milkweed Editions, 2013

Jill Desimini, *From Fallow: 100 Ideas for Abandoned Urban Lansdscapes*, Oro Editions, 2019.

Elizabeth Kolbert, "Enter the Anthropocene: Age of Man," in *Making the Geologic Now: Responses to Material Conditions of Contemporary Life*, edited by Elizabeth Ellsworth and Jamie Kruse (Brooklyn: Punctum Books, 2012), 28-32. http://www.geologicnow.com/1_Kolbert.php

Anna Tsing, Heather Swanson, Elaine Gan, Nils Bubandt (Eds), *Arts of Living on a Damaged Planet,* University of Minnesota Press, 2017.

Bruno Latour, *Facing Gaia: Eight Lectures on the New Climate Regime,* Polity Press, 2015.

William Cronon. *Uncommon Ground: Rethinking The Human Place In Nature*. New York, NY: WW Norton, 1996.

Elizabeth Kolbert, *The Sixth Extinction: An Unnatural History*. New York: Henry Holt and Co., 2014.

Katrin Klingan, Ashkan Sepahvand, Christoph Rosol, and Bernd M. Scherer, eds. *Textures of the Anthropocene: Grain Vapor Ray*. Cambridge, MA: The MIT Press, 2015.

David Harvey, *Justice, Nature and the Geography of Difference*. 1 edition. Cambridge, Mass: Wiley-Blackwell, 1997.

Naomi Klein. *This Changes Everything: Capitalism vs. the Climate*. Toronto: Knopf Canada, 2014.

Naomi Klein, *On Fire: The burning case for a Green New Deal*. Toronto: Knopf Canada, 2019.

Zoe Todd, "Indigenizing the Anthropocene," in *Art in the Anthropocene: Encounters Among Aesthetics, Politics, Environment and Epistemology*. Heather Davis and Etienne Turpin, editors. Open Humanities Press.

Diana Coole ed. *New Materialisms: Ontology, Agency, and Politics*. Durham NC ; London: Duke Univ Pr, 2010.

John McPhee, *The Control of Nature*. McPhee, John. *The Control of Nature*. New York: Farrar Straus and Giroux, 1990.

Matthew Gandy, *Concrete and Clay: Reworking Nature in New York City*. Cambridge, Mass.: The MIT Press, 2003.

David Gissen, *Manhattan Atmospheres: Architecture, the Interior Environment, and Urban Crisis*. Minneapolis: Univ Of Minnesota Press, 2014.

J. R. McNeill and Peter Engelke. *The Great Acceleration: An Environmental History of the Anthropocene since 1945*. Cambridge, Massachusetts: Belknap Press: An Imprint of Harvard University Press, 2016.

<u>Communication</u>

Steven Pinker, "Good Writing," "A Window onto the World," *The Sense of Style: The Thinking Person's Guide to Writing in the 21$^{st}$ Century,* (Allen Lane: London, 2014).

Umberto Eco, "Writing the Thesis," pp. 145-184, "Conclusions" p. 221-223. *How to Write a Thesis,* (MIT Press, 2015)

**Remote Course Delivery Platforms & Communication**
During blended/remote learning, we will be using additional platforms to deliver, organize and share course content, learning and work. Online platforms are listed at the top of this syllabus.

**In-person Activities Planning**
If course activities are impacted by a change in restrictions to in-person activities, such as changes in room occupancy limits, the instructor will communicate updated in-person activity plans. These plans may alter student plans for in-person activities.

**Course Time Zone**
All dates and times communicated in the document are expressed in Eastern Time. Eastern Standard Time (EST, UTC−05:00) applies November to March and Eastern Daylight Time (EDT, UTC−05:00) applies from March to November.

**Fall 2021 COVID-19 Special Statement**
Given the continuously evolving situation around COVID-19, students are to refer to the University of Waterloo's developing information resource page (https://uwaterloo.ca/coronavirus/) for up-to-

date information on academic updates, health services, important dates, co-op, accommodation rules and other university level responses to COVID-19.

***Student Notice of Recording***

The course's official *Notice of Recording* document is found on the course's LEARN site. This document outlines shared responsibilities for instructors and students around issues of privacy and security. Each student is responsible for reviewing this document.

***Mental Health Support***

All of us need a support system. We encourage you to seek out mental health supports when they are needed. Please reach out to Campus Wellness (https://uwaterloo.ca/campus-wellness/) and Counselling Services (https://uwaterloo.ca/campus-wellness/counselling-services).
We understand that these circumstances can be troubling, and you may need to speak with someone for emotional support. Good2Talk (https://good2talk.ca/) is a post-secondary student helpline based in Ontario, Canada that is available to all students.

***Equity, Diversity and Inclusion Commitment***

The School of Architecture is committed to foster and support equity, diversity and inclusion. If you experience discrimination, micro-aggression, or other forms of racism, sexism, discrimination against 2SLGBTQ+, or disability, there are several pathways available for addressing this:
A) If you feel comfortable bringing this up directly with the faculty, staff or student who has said or done something offensive, we invite you, or a friend, to speak directly with this person. People make mistakes and dealing them directly in the present may be the most effective means of addressing the issue.
B) you can reach out to either the Undergraduate office, Graduate office, or Director (Anne Bordeleau). If you contact any of these people in confidence, they are bound to preserve your anonymity and follow up on your report.
C) You can choose to report centrally to the Equity Office. The Equity Office can be reached by emailing equity@uwaterloo.ca. More information on the functions and services of the equity office can be found here: https://uwaterloo.ca/human-rights-equity-inclusion/about/equity-office.
D) Racial Advocacy for Inclusion, Solidarity and Equity (RAISE) is a student-led Waterloo Undergraduate Student Association (WUSA) service launching in the Winter 2019 term. RAISE serves to address racism and xenophobia on the University of Waterloo campus with initiatives reflective of RAISE's three pillars of Education and Advocacy, Peer-to-Peer Support, and Community Building. The initiatives include but are not limited to: formal means to report and confront racism, accessible and considerate peer-support, and organization of social events to cultivate both an uplifting and united community.  You can report an incident using their online form.

***Academic integrity, grievance, discipline, appeals and note for students with disabilities:***

Academic integrity: In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. [Check the Office of Academic Integrity for more information.]
Grievance: A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70, Student Petitions and Grievances, Section 4. When in doubt, please be certain to contact the department's administrative assistant who will provide further assistance.
Discipline: A student is expected to know what constitutes academic integrity to avoid committing an academic offence, and to take responsibility for his/her actions. [Check the Office of Academic Integrity for more information.] A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about "rules" for group work/collaboration should seek guidance from the course instructor, academic advisor, or the undergraduate associate dean. For information on categories of offences and types of penalties, students should refer to Policy 71, Student Discipline. For typical penalties, check Guidelines for the Assessment of Penalties.

Appeals: A decision made or penalty imposed under Policy 70, Student Petitions and Grievances (other than a petition) or Policy 71, Student Discipline may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to Policy 72, Student Appeals.

Note for students with disabilities: AccessAbility Services, located in Needles Hall, Room 1401, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with AccessAbility Services at the beginning of each academic term.

Turnitin.com: Text matching software (Turnitin®) may be used to screen assignments in this course. Turnitin® is used to verify that all materials and sources in assignments are documented. Students' submissions are stored on a U.S. server, therefore students must be given an alternative (e.g., scaffolded assignment or annotated bibliography), if they are concerned about their privacy and/or security. Students will be given due notice, in the first week of the term and/or at the time assignment details are provided, about arrangements and alternatives for the use of Turnitin in this course.

It is the responsibility of the student to notify the instructor if they, in the first week of term or at the time assignment details are provided, wish to submit the alternate assignment.