

## **Designing a climate corps for MIT 4.183**

Fall 2023, September 11-December 11

### **Instructor:**

Lisbeth Shepherd, Lecturer, Architecture and Entrepreneur in Residence, DesignX

### **Schedule and location:**

Mondays 5:30-7:30 pm (dinner provided), in the DesignX space: 7-336

Credits: 2-0-4 units

### **Collaborators:**

Brian Goldberg, Assistant Director, MIT Office of Sustainability (MITOS)

Svafa Grönfeldt, Professor of Practice SA+P; Faculty Director, MITdesignX

Winn Costantini, Environmental Planning and Policy Scientist at the Academy of Natural Sciences of Drexel University

The MIT Urban Risk Lab

Kannan Thiruvengadam, 2024 Loeb Fellow, Director, Eastie Farm

PowerCorps Boston

### **Overview**

What if there were a corps that enabled students to take action together on climate and environmental justice issues on campus and in the community, for sustained periods of time? Could it accelerate progress towards MIT and city climate action goals while fostering community and personal growth for members?

Through this workshop, students will explore the idea of creating an MIT Climate Corps, inspired by the vision and promise of a national Civilian Climate Corps to meet the dual imperatives of climate and equity through a major mobilization of young adults across the country, in cities and in communities. Around the country, climate corps are enabling young people to work together to address climate issues while gaining skills and experience on a path to careers in rapidly growing industries. In Boston, the Eastie Farms Climate Corps in East Boston, PowerCorpsBOS and the BlocPower Cambridge Civilian Climate Corps are examples of paid climate corps programs, recently launched, offering local residents a platform to address issues like urban agriculture, urban forestry, invasive species removal, and energy efficiency, learning through doing while catalyzing new partnerships and possibilities. Could a dedicated climate corps at MIT add to the growing network of local climate corps in the Boston area, by catalyzing an MIT climate workforce?

Weekly classes will feature speakers, discussion and joint work, and take place over dinner. Students will learn from passionate actors on campus and in the community, and engage with the campus as a classroom, through concept and stakeholder mapping,

stakeholder engagement and the delivery of recommendations and proposals for the creation of a climate corps adapted to the unique assets of MIT. The workshop will be hands-on and action-oriented. Students will organize a climate serve-a-thon event as part of the class, exploring elements of the climate corps concept through the process; and a showcase at the end of the class to share back with the MIT community. Students will conduct 4 hours of weekly work outside of class, which will involve concept/stakeholder mapping and stakeholder engagement, as well as individual and group work to organize two public events offering the campus community the means to get involved. Assignments will be communicated weekly for the next class.

The workshop is part of a multi-year, interdepartmental research project around “Building a successful Civilian Climate Corps” initiated by Nicholas De Monchaux and Chris Zegras, involving students, faculty and partners internal and external to MIT, including SA+P, the Urban Risk Lab, DesignX, Green City Force, Eastie Farm, and PowerCorps Boston. It is a key component of a project developed by Miho Mazereeuw and Lisbeth Shepherd, with MITOS, students and partners involved in the MIT CCCI, exploring the potential for an MIT Climate Corps, supported by the D’Arbeloff fund.

Products will include:

- a set of concept and stakeholder maps/visualizations of current initiatives and offerings, as well as potential partners and resources, related to an MIT Climate Corps
- a climate serve-a-thon event piloting aspects of what an MIT climate corps could do, benefitting groups on and off-campus
- a showcase to share stakeholder voices and perspectives and student proposals for how an MIT Climate Corps can respond to MITOS imperatives, community priorities and student interests.

Learning objectives:

- *Concept and Stakeholder Mapping*: students will learn how to use diagrams to understand and visualize the context and history, identify existing assets and potential partners and collaborators for an MIT Climate Corps, and create tools to organize and communicate this information to others.
- *Deep listening and iterative design*. Students will take the lens of a specific climate-related problem presented by MITOS, to explore and iterate how an MIT Climate Corps could respond. This process would include understanding the context of a problem across scales of impact (ie individual, campus, city, global). Through reflection, they will explore their own experiences and positionality and how they relate to designing a corps that seeks multifaceted impact. Finally, students will have the opportunity to choose a facet of design for an MIT Climate Corps to focus on as part of the final showcase.

- *Conducting stakeholder research:* Students will learn the MITdesignX approach to stakeholder research, applying it to the MIT campus and community and to exploring the problem presented by MITOS.
- *Piloting components of a corps through events that engage the MIT community:*
  - Organize a **climate serve-a-thon event** to engage students and partners in the experience of being part of a “climate corps for a day”.
  - **Using findings from the stakeholder research, partner engagement and climate serve-a-thon, organize a showcase to share ideas for an MIT CC.** Students will choose design impact areas to focus on for the showcase (climate, community, careers), considering implementation, and represent them in an engaging manner.

Guest speakers and partners will include:

- Brian Goldberg, Assistant Director of MITOS, will orient students to the campus climate goals and provide a deep dive around how MIT is organizing to design out waste from campus
- Students will learn how Miho Mazereeuw, Assistant Professor and Director, Urban Risk Lab, co-lead and host of the MIT Civilian Climate Corps Initiative, and students have been piloting collective reuse, a test case for an MIT Climate Corps
- Winn Costantini, Environmental Planning and Policy Scientist at the Academy of Natural Sciences of Drexel University, DUSP '21, will instruct students in creating concept and stakeholder maps relevant to building climate corps
- Svafa Gronfeldt, faculty director of MITdesignX, will lead a workshop on stakeholder research and organizing a showcase, as part of entrepreneurial design (see more about the DesignX program here: <https://designx.mit.edu/>).
- Justin Brazier and Calvin Zhong, current masters students in Architecture, will offer a test case and thoughts on how an MIT Climate Corps could help build student-led initiatives on campus and in neighboring Cambridge and Boston.
- Kannan Thiruvengadam, 2024 Loeb Fellow, and founder, Eastie Farms Climate Corps (<https://loebfellowship.gsd.harvard.edu/fellows-alumni/fellows-search/kannanthiruvengadam/>) will provide thought partnership, as we investigate how an MIT Climate corps could accelerate impact for community groups in cities and communities around MIT.
- Students will have the opportunity to involve and interact with corps members and staff from PowerCorps Boston, Boston city’s climate corps in a spirit of reciprocity through a site visit of the corps to campus and serve-a-thon event, hosted by PowerCorps Boston sites around the city.

Grading: Participation 35%; Assignments 30%; Events and related final products 35%.

## Schedule

Please keep in mind that some dates are subject to change.

Week	Date	Topic	Assignments
1	9/11	<p>An MIT Climate Corps: what if?            The idea of an MIT CC - core components and examples from existing models            Scales of action: why focus on campus and community; fitting the scale of problems and solutions, identifying needs and assets            Campus: SA+P as a test bed            Introducing mapping as a tool for climate corps design</p> <p>With Winn Costantini, Environmental Planning and Policy Scientist at the Academy of Natural Sciences of Drexel University, DUSP '21</p>	<p>Review the workshop design brief.            Watch recording and complete first mapping assignment: Concept and Stakeholder Mapping technique for climate corps, with Winn Costantini, DUSP alum.</p>
2	9/18	<p>MIT Climate Corps: what could it mean for MIT climate action goals?            Brian Goldberg, Brian Goldberg, Assistant Director of MITOS. Campus deep dive:            What are the issues and what could an MIT CC do to address them?            The example of collective reuse, Urban Risk Lab            Sharing back from mapping workshop and discussion</p>	<p>Mapping project starts - office hours with Winn Costantini by appointment            Reflections            Attend climate symposium (subject to availability)</p>
3	9/25	<p>Voices and visions:            Stakeholder research and organizing a showcase, with Svafa Gronfeldt</p>	<p>Stakeholder research            Outreach based on list provided and fleshed out during the workshop</p>

		Building the list and questions for stakeholder engagement around an MIT Climate Corps	
4	10/2	<p>Piloting through events:</p> <p>Climate serve-a-thon: workshopping the event and group work to build the work plan</p> <p>Guest speakers: Justin Brazier and Calvin Zhong, current masters students in Architecture</p> <p>Group work to build the work plan.</p>	<p>Mapping and stakeholder research</p> <p>Event prep starts</p>
5	10/9	<i>Indigenous Peoples Day - no class</i>	Assignment: reflection, mapping & engagement, and event prep
6	10/16	<p>Preliminary share-back to Brian Goldberg.</p> <p>Environmental justice in Cambridge: guest speaker.</p> <p>Group work: event and prep for PowerCorps Boston site visit.</p>	<p>Event prep</p> <p>Students help host PowerCorps BOS site visit to campus, 10/20 (subject to availability)</p>
7	10/23	Climate serve-a-thon week: community events	Students join PowerCorps BOS members on projects in Boston (subject to availability): 10/24, 10/25, 10/26
8	10/30	<p>Climate serve-a-thon week: campus events</p> <p>Group work: debrief community events. Planning and organization for campus events.</p>	Dates and times tbd based on class work.
9	11/6	<p>Scales of action: Community, City...and Beyond</p> <p><i>How could an MIT Climate Corps accelerate local leaders working on climate progress towards goals?</i></p> <p><i>Build capacity for Justice 40 and IRA</i></p>	<p>Wrapping up mapping and stakeholder interviews.</p> <p>Reflection and proposals for final showcase products. In addition to the mapping and voices products, students will choose an aspect of</p>

		<i>implementation?</i> <i>Guest speakers: tbd</i>	climate corps impact design to focus on: climate, community, careers.
10	11/13	Tying it all together in the final showcase. Sharing from reflections and proposals; discussion and group work for the showcase.	Student projects
11	11/20	Group work to prepare the final showcase	Thanksgiving break
12	11/27	Group work	Students produce and host the showcase event, on a date this week to be determined together, in the DesignX space.
13	12/4	Event debrief	Final reflections, closing out with stakeholders
14	12/11	Reflection and setting up the next phase	
		<i>Showcase will remain as an exhibit and engagement tool in DesignX</i>	

**The MIT Civilian Climate Corps Initiative**

A national Civilian Climate Corps is a once-in-a-generation opportunity to meet the dual imperatives of climate and racial justice in the United States at scale. Our multi-year research project explores the potential of “climate corps” to build equitable and resilient cities. The project seeks to contribute to effective, large-scale implementation of the “climate corps” idea, for impact on racial, economic and environmental justice in cities, through coursework, research and convenings. How can a federal program centered on civilian service and green jobs accelerate existing efforts and local visions for building an inclusive green economy and resilient communities in cities? What tools and research are needed that can help impact and collaboration? How might we design for climate, community, social, and economic impact simultaneously?

**Advancing racially just research at the intersection of climate, community and resiliency**

The Civilian Climate Corps Initiative aims to:

- center experiences, leadership, voices and scholarship of Black, Indigenous People of Color (BIPOC)
- explore how CCC projects, models, approaches can help close the racial wealth gap and accelerate environmental justice in cities and communities
- work with practitioners to create tools helpful for accelerating impact and collaboration, through modeling, mapping, prototyping, storytelling etc.
- explore how CCC scaling relates to verticals within built and natural environment equitable systems (energy democracy, zero waste, green infrastructure, etc.);
- acknowledge history, interrogate gaps and seek varied perspectives.

## **A galvanizing national vision**

President Biden issued an executive order, in January 2021, on tackling the climate crisis that creates a Civilian Climate Corps “*to mobilize the next generation of conservation and resilience workers and maximize the creation of accessible training opportunities and good jobs. The initiative shall aim to conserve and restore public lands and waters, bolster community resilience, increase reforestation, increase carbon sequestration in the agricultural sector, protect biodiversity, improve access to recreation, and address the changing climate.*”

This commitment came on a wave of interest for the idea of a Civilian Climate Corps. Evergreen Action and The Corps Network outlined how the idea could work to reach millions, while legislative proposals proliferated throughout 2020 and the issue became a central ask of the youth-driven Sunrise Movement. While the timeline and degree of federal funding for a CCC have continued to be under debate, the national network of existing conservation corps - which engages 20,000 young adults annually across the country - is gearing up for growth, while cities and entrepreneurs from Austin to Boston haven't waited to launch new programs. A national survey published by Data for Progress in 2023 reflects that bipartisan support for the idea of a Civilian Climate Corps remains high<sup>1</sup>.

## **Climate Corps at the neighborhood and city levels in Boston**

Eastie Farms Climate Corps was piloted in 2022 for 14-17 year olds in East Boston. At the city level, the Boston Conservation Corps was included as part of Mayor Michelle Wu's vision for a Boston Green New Deal. The need for green workforce development, laid out in the Green New Deal for Boston in 2020, is framed as a racial and economic justice issue<sup>2</sup>. DUSP graduate, Winn Costantini, delved into the context and potential of a Boston climate corps in a 2021 master's thesis, mapping existing actors and enabling environments at the citywide level, and proposing indicators for the design of a racially equitable Boston corps. The process revealed the lack of research relative to climate corps, and specifically anti-racist research centering BIPOC young adults and communities, and the potential for MIT students to contribute to this field. PowerCorps BOS was launched in 2022 as the city's climate corps. Over the past year, MIT students have been working with EF CC and with PowerCorps BOS on various projects in response to their needs as they build their program and organization.

## **Land Acknowledgement Statement**

We acknowledge Indigenous Peoples as the traditional stewards of the land, and the enduring relationship that exists between them and their traditional territories. The lands which MIT occupies are the traditional unceded territories of the Wampanoag Nation and the Massachusetts Peoples. We acknowledge the painful history of genocide and

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<sup>1</sup> *A Civilian Climate Corps is Broadly Popular*, by Abby Smith, January 5th, 2023: <https://www.dataforprogress.org/blog/2023/1/5/a-civilian-climate-corps-is-broadly-popular>

<sup>2</sup> *Planning for a Green New Deal for Boston and a Just Recovery*, Office of Boston City Councilor Michelle Wu, August 2020, p. 26

forced occupation of these territories, as well as the ongoing processes of colonialism and dispossession in which we and our institution are implicated. Beyond the stolen territory which we physically occupy, MIT has long profited from the sale of federal lands granted by the Morrill Act, territories stolen from 82 Tribes including the Greater and Little Osage, Chippewa, and Omaha Peoples. We honor and respect the many diverse Indigenous people connected to this land from time immemorial..

### **Antiracist statement**

Urban design has long served as a tool of white supremacy, where oppressive policies, practices, and attitudes are manifested into the physical environment and in policies and programs. This course is committed to practice that supports liberation and environmental and economic justice.

### **Inclusive Classroom and Reflective Practice**

MIT values an inclusive environment. We hope to foster a sense of community in this classroom and consider this classroom to be a place where you will be treated with respect. We welcome individuals of all backgrounds, beliefs, ethnicities, national origins, gender identities, sexual orientations, religious and political affiliations – and other visible and nonvisible differences. All members of this class are expected to contribute to a respectful, welcoming, and inclusive environment for every other member of the class. If this standard is not being upheld, please feel free to speak with one of us. Reflection will be a significant aspect of the workshop, with students examining how they think and learn in the course of action and deepen their understanding of designing for multiple outcomes. In addition we will have readings and discussion that will allow our class to engage with ideas and practices around anti-racist research.

### **Wellness**

Your wellness matters to me as your instructor. If you need time, space, support, never hesitate to reach out ([lisbeths@mit.edu](mailto:lisbeths@mit.edu) or 510-910-6900). Personal and medical issues can make it hard to focus on academics; beyond me, undergrads, if you find that something is getting in the way of your ability to attend class, complete work, or take an exam, you should contact a dean in [Student Support Services \(S3\)](#). The deans will provide you with support and help you work with us to determine next steps. We ask that you go to S3 so we know you have had a chance to talk through your situation with someone and to connect with any resources you might need. You can reach out to a dean you have worked with in the past, join their virtual help queue (<https://sicc-s3.mit.edu/queue>), or e-mail [s3-support@mit.edu](mailto:s3-support@mit.edu). Graduate students, [GradSupport](#) provides consultation, coaching, and advocacy to graduate students on matters related to academic and life challenges. If you are dealing with an issue that is impacting your ability to attend class, complete work, or take an exam, you may contact GradSupport by email at [gradsupport@mit.edu](mailto:gradsupport@mit.edu) or via phone at (617) 253-4860.

### **Special Accommodations**

MIT is committed to the principle of equal access. Students who need disability accommodations are encouraged to speak with Disability and Access Services (DAS), prior to or early in the semester so that accommodation requests can be evaluated and addressed in a timely fashion. If you have a disability and are not planning to use accommodations, it is still recommended that you meet with DAS staff to familiarize



yourself with their services and resources. Please visit the [DAS website](#) for contact information. If you have already been approved for accommodations, please inform me - I am ready to assist with implementation.

### **Academic Integrity**

In this course, I will hold you to the high standard of academic integrity expected of all students at the Institute, for two reasons. First, it is essential to the learning process that you are the one doing the work. I have structured the assignments in this course to enable you to gain a mastery of the course material. Failing to do the work yourself will result in a lesser understanding of the content, and therefore a less meaningful education for you. Second, it is important that there be a level playing field for all students in this course and at the Institute so that the rigor and integrity of the Institute's educational program are maintained.

Violating the Academic Integrity policy in any way (e.g., plagiarism, unauthorized collaboration, cheating, etc.) will result in official Institute sanction. Possible sanctions include receiving a failing grade on the assignment or exam, being assigned a failing grade in the course, having a formal notation of disciplinary action placed on your MIT record, suspension from the Institute, and expulsion from the Institute for very serious cases. Please review MIT's [Academic Integrity](#) policy and related resources (e.g., working under pressure; how to paraphrase, summarize, and quote; etc.) and contact me if you have any questions about appropriate citation methods, the degree of collaboration that is permitted, or anything else related to the Academic Integrity of this course.

### **Carbon Footprint**

This workshop will take place at MIT and at times take us to locations around the city, for which we will prioritize public transportation. We anticipate creating digital and printed versions of the products, keeping printing to a minimum.