"A Center for Regenerative Building, envisions a novel building type and emerging institution that serves simultaneously as a local material resource, an incubator of new business and workforce development, and a testbed for biologically regenerative and circular economic building materials and practices."

Envision a regenerative future that turns waste into resources by designing a community makerspace with a warehouse for recycled building materials, workyards, classrooms, offices and a hostel. Explore climate action by combining local resources, skills and social capital into an enterprise that supports Nature. Students will study Design for Change and the Circular Economy, creating long-lived adaptable structures with thoughtfully placed cores, space planning for flexible use and design for disassembly. They will examine approaches for re-using building materials such as building long-span structures with small pieces.

- In the Fall term seminar, students can propose their own sites and tune the center’s agenda. They will identify compelling inquiries in the brief, research possible sites and approaches to address climate change. From these studies, they will customize the project agenda to be site-specific.
- The Winter term studio welcomes students to design visually and spatially compelling forms that address human and ecological needs using both traditional and digital techniques. Design as discovery through tactile prototyping, working with material characteristics and serendipity will be complemented by parametric variations and performance simulations. Students are encouraged to study and share design techniques such as carbon accounting, energy simulation or artificial intelligence tools.
- The Spring term studio will focus on technical development of Design Synthesis and Building Integration. External professionals will help coach comprehensive design of building systems (structure, environmental control systems, building enclosure) and code compliance.

The Lyceum Competition awards travel scholarships of $15,000, $10,000 and $5,000 to the most compelling design narrative. Download the Center for Regenerative Building competition brief.

As we reach a climate tipping point, the 2024 Lyceum Competition challenges students
- To restore and stabilize our climate using carbon-neutral materials and assemblies
- To support and enhance regional biodiversity
- To creatively repurpose consumer and industrial waste flows
- To broaden socioeconomic opportunity

Download the Center for Regenerative Building competition brief.

About the Instructor: Nancy Cheng has led five terminal studios including a DIY makerspace. In 2015 Lyceum competition, Cheng’s students won First prize and a Merit Award. She loves learning from others and synthesizing connections between different fields. As a daughter of Chinese immigrants who grew up in a Jewish St. Louis suburb, she appreciates diverse histories and identities. Her education was rooted in Bauhaus material studies and formal composition, and she has led national computational design groups. She enjoys art, bicycling, fiction, craft, travel and is inspired by nature.

"There is no such thing as ‘away’. When we throw anything away it must go somewhere." – Annie Leonard, Greenpeace