Design Research Studio: HJA Experimental Forest

Fall 2020

LA 4/594

Time: Monday, Wednesday, and Friday. 1-5pm

Location: TBD

Instructor: David Buckley Borden

Research Assistant: Abby Pierce

Curricular Context: Required studio in the BLA and MLA degree programs

Studio Prerequisites: Successful completion of (3) 489 or 589 studios
Studio Description
This design research studio is organized around research methods that actively employ solution-driven creative workflows within a design process. Students will learn a variety of “research through design” skills that will be transferable to a range of landscape architecture applications and scales. The site, inspiration, and initial community partner for the studio will be the HJ Andrews Experimental Forest (HJA) in Blue River, OR.

Students will select their own design research topics in response to the place, research, and community of the HJA. Potential topics of inquiry include forest management, watershed stewardship, carbon dynamics, and natural and manmade disturbances, including wildfires. A list of HJA research programs can be found here. Building off the HJA’s research efforts, successful studio projects will foreground pressing environmental challenges of the Anthropocene, in terms of both design problem and final solution.

Final studio projects will vary in response to student interests and goals, and will likely manifest in a variety of design products ranging from functional prototypes to sci-comm installation proposals to other place-based design projects.

Design research methods will be incorporated in all stages of the design process and include both indirect (literature, case study, and precedent review) and direct methods of design inquiry. Direct design research will not only include site inventory and analysis, but employ design research tools to drive concept generation and the application of concept to site. “Research through making” will be central to the studio experience. The studio’s design research process aims to expose students to a diversity of design research approaches, and subsequently includes artistic, adaptive, analytical, and systematic methods.

HJA Design Research Drawings by DBB: inventory diagram as stakeholder research tool (top), sci-comm drawing as community outreach (middle), speculative installation as research prompt (bottom)
Context
The HJ Andrews Experimental Forest (HJA) is a landscape of inquiry. Its mission is to support research on forests, streams, and watersheds, and to foster collaboration among ecosystem science, education, natural resource management, and the humanities.

The HJA is a center for ecosystem research in the Pacific Northwest. The research program has its roots in the establishment of the HJA in 1948 by the US Forest Service. The Andrews Forest became a charter member of the National Science Foundation’s Long Term Ecological Research (LTER) program in 1980. Long-term measurement programs continued on experimental sites and watersheds with a focus on questions about climate, streamflow, water quality, vegetation succession, biogeochemical cycling, and effects of forest management.

HJA research is ongoing, and continues to reveal surprising and important information relative to landscape architects and other allied professions proactively engaged in environmental stewardship.

Also relative to the design research studio is the Long-Term Ecological Reflections (LTEReflections) project, an arts and humanities program that takes place at the HJA and will continue for 200 years (2003 to 2203). The mission of the Long-Term Ecological Reflections program is to bring together writers, humanists, artists, and scientists to create a living, growing record of how we understand the forest and the relation of people to the forest, as that understanding and forest both change over time.

HJ Andrews Experimental Forest Research: landslide simulation flume (top), decomposition research cookie (middle), and stream research installation (bottom).
**Studio Format**

The studio format will be organized around rigorous project work, one-on-one desk critiques, pin-ups, peer reviews, guided class discussions, presentations, and guest lectures from HJA, Harvard Research Forest, Harvard metaLAB, Rios, and other professionals actively engaged in design research as part of their creative practice.

The studio will be organized around a variety of hands-on design research methods that include the creation of drawings, models, and props, as intentional research methods for concept development, community engagement, and final design proposal.

Preparation for all critiques, pin-ups, and reviews is essential. Preparation not only includes drawings/models for discussion, but also an investment of critical-thinking into the creative process and intellectual development of the work.

Beyond class meetings, students will be required to read selected readings. Optional readings are highly encouraged.

**Grading**

Consistent with all Department of Landscape Architecture studios, this studio is graded Pass/No Pass with formative and summative feedback. Subcategories of “Pass” may be awarded, listed in increasing order of the quality of effort: Marginal Pass, Pass, High Pass, and Pass with Distinction. Exceptional effort, experimentation, and creative risk taking will be rewarded in final grade.