

Course Syllabus

This course introduces students to fundamental properties of materials and fabrication techniques, in the combined format of a seminar and physical workshop. It will provide hands-on experience in building skills, focusing on the connectivity of analog and digital methods, as well as encouraging a type of engagement with making physical things that is analytical and creative.

The title of the course is literal in that it is a fabrication workshop concerned with the nature and performance of materials, examined and tested through direct experience. The title is also a reference to our necessary attachment to materials and material things as designers, and a nod to the productive cultural institutions that emerge around the act of making.

As such, the course will examine the relationship between materials and methods by engaging (through discussion and workshops) the conceptual and historical themes that establish making as an act of design thought. This will include discussion of the history of making as part of design education, making countercultures, and the reexamination of craft vis a vis digital fabrication.

The semester will be broken into three acts, each centered on a fabrication theme and deliverable physical project. Each part will have an associated conceptual prompt, technical lesson, and design workshop. Activities incorporated into these acts may include but are not limited to: studio and workshop visits in the tri-state area, invited thinkers and experts, whole-class exercises, and multimedia-driven critical discussion.

Class time will include two opt-in field trips to woodworking studios/Lumber yards around Trenton NJ, and to a prominent artist's studio on Long Island.

ACT 1 : MIXED PRIMITIVES

+ Geometry and Form, the shaping and finishing of material.

ACT 2 : THE EXPANDED JOINT

+ Every detail is a joint : the study and reimagining of a material joint and/or joinery system.

ACT 3 : ARTIFACT OR FICTION

+ Beauty is (not) in things themselves : exploration of a material technique, making a material artifact.

Honoring the DIY ethos culturally entangled with 'making,' seminar discussions and project critiques will be largely student-driven, curated in formats conducive to student participation as productive self-critics. This will emphasize the use of multiple media and formats to present and critique work. Key points in the development of projects will be supported with the help of guest critics--subsequently, final project reviews will engage different audiences, both internal and public.

As such, participation forms the nucleus of the course and emphasis will be placed on opportunities for participation and conceptual engagement, in addition to the course's goal of the development of real fabrication skills.

Students will also be encouraged to feel at home as navigators of the Fab Lab and bearers of its knowledge and mission going forward.