

CARNEGIE MELLON —ARCHITECTURE



48-317 S22 Students Conceptual models

48-317: The Chair

Units: 9

Instructor: Vicki Achnani

Making entitles to an intimate connection with the site, native atmosphere, components and assemblies, where a designer/maker can operate at local, regional and global levels comprising all the building systems. This sedulous process takes very close to the materials where a designer/maker can gather insights into material behavior (both mechanical and visual) and is better placed to alter the effects of architecture through its materials and generating processes. The same can be applied to chair-making. The chair no longer remains a chair, as the making process makes it a ground of experimentation and learning to shape the material into the desired object. The reaction with the matter is no longer inert, as it tends to provide feedback to the maker while shaping it.

This is an intense design and prototyping course fueled by research, experimentation, material feedback and tooling. By fully engaging in hands-on learning, students can enhance their thought process, judgment of material behavior, constructional thinking, and ability to experiment and employ the appropriate tools to conserve materials. This type of learning also fosters intuitive thinking, and the development of new ideas for production and assembly while strengthening the connection between the mind and hands. Prototyping and making largely help develop the understanding concept of joinery/material behavior and properties about form. The exercise allows students to understand the chair as a piece of furniture, the manner of making that gives qualities to an abstract design or idea, the know-how of handling material, the emergence of tacit knowledge in the maker, and tolerance and feedback from the material. This spring, we plan to explicate and employ alternative materials such as agro waste, natural fibers, bamboo and mycelium to develop full-scale chair prototypes. We will meet twice a week, and students are required to devote an additional 8 hours per week to research and development of their individual /group chairs, with the goal of completing a full-scale prototype as the end product of the course.

