CourseNo: ARCHA4798_001_2013_1
Meeting Location: RTBA
Meeting Time: R 05:00P-07:00P

Instructor Information:
Nathaniel R Carter

Craft: in the Digital Age

A4798 Spring 2013

Instructor: Nathan Carter

Location: Laboratory for Applied Building Science

What is the role of craft in architecture?

The skills of the architect are now dedicated to the digital. The making and testing of a project can take place entirely in the computer, but without an intimate understanding of materials and techniques of making, the architect's digital work has limited efficacy.

Making and testing belongs within the larger feedback loop of design.

The aim of the class is twofold:

-To explore craft, developing a personal understanding of materials, tools, and techniques to directly inform the design process.

-To frame this exploration in a larger context of analog and digital design and fabrication, highlighting efficiencies and limitations, and rethinking the orchestration of the two by the designer.

The class is structured around weekly, hands-on exercises in the Laboratory for Applied Building Science. Students will become proficient with a number of tools, and we will test construction and joinery techniques. We will discuss tolerances, material properties/constraints, and work-flow/logic.

Each week, students will design and fabricate one Seating Unit (SU). The Seating Unit will be made of wood and must support one person sitting. Additional criteria will be given for each assignment. Students may work in pairs if desired. Students will bring their SU to the next class along with drawings that explain the assembly process and potential aggregation schemes for making and deploying multiple Seating Units.

The final project is to design and fabricate a multi-person Seating Unit that demonstrates an understanding of materiality, tools, and techniques developed from our exploration of craft. This could be one piece at a larger scale that accommodates multiple people, or it could be a development on the aggregation of multiple single person Seating Units.

Outline of Class:

Week 01: Saws and Wood Joinery

Assignment- Make one Seating Unit with no fasteners

Week 02: Drills, Routers, and Fasteners

Assignment- Make one Seating Unit that can stack, nest, collapse, or transform

Week 03: Hand Tools and Jigs

Assignment- Make one Seating Unit that requires the use of a jig or joinery with hand tools

Week 04: Gluing, Clamping, and Finishing

Assignment- Make one Seating Unit that includes laminated or bent components

The design of the formwork and process of making is as important as the final product.

Week 05: Wrap up lamination project and discuss final assignment

Week 06: Final project work session

place final material orders early in the week

Final Review