### 4.120 Furniture Making

### Instructor

Chris Dewart

Credit Units 2-2-5 Level G

### Prerequisites: permission of instructor

### Schedule

### Wednesday and Friday 10-11:30 am in N51-160, 265 Massachusetts Avenue. If necessary, will schedule a second meeting time for MArch thesis-prep students unable to attend the Friday class.

### Subject Description

Provides instruction in designing and building an original piece of furniture. First class will survey the history of furniture making. Subsequent classes cover understanding wood properties and behavior, demonstrating woodworking techniques and students practicing joinery. By March, final furniture design is resolved and building begins. Limited to 12 students

**List of Subject Objectives**:

Develop woodworking techniques using traditional joinery and digital fabrication.

CNC carved milking stool seat, legs turned on lath or carved.

Draw section, plan, elevation detail of design proposal.

Design and build original piece of furniture

### Evaluation Criteria

Complete one piece of furniture for exhibition in May.

Attendance to the first class, 10 am Wednesday, February 8, 2023 in N51-160, is mandatory for guaranteed acceptance into class (class limit 12). You are allowed three excused absences for the semester. An excused absence is defined as one that was discussed with and approved by the instructor. Absences beyond the three allotted will result in a decrease in your final grade. If you miss six or more classes, you will be asked to drop the subject or you will receive a failing grade.

Sometimes there is a moment in crafting when the maker sees their idea begin to take shape and, with a tool in hand, reaches a moment of perfection. Keeping the design simple provides the opportunity to enjoy the experience of furniture making. It takes the entire semester to build with a significant amount of my time, providing personal instruction. I am often doing a portion of the building. It is important to be at every class, not to miss demonstrations. Maintaining a steady workflow keeps the project moving along.

The furniture is primarily made of rough 1” and 2” hardwood boards you will mill flat, square and to thickness using woodworking machines, joiner, planer, table saw, CNC router, to become furniture parts.

We often steam bend laminations to create curved parts and CNC parts and surfaces.

Wear appropriate work clothing and foot wear.

No convertible furniture, folding chairs or tables, no cabinets.

Schedule of Lecture, Projects, Assignments

4.120 Furniture Making Syllabus

Lecture/Work ASSIGNMENT

February 7 Wed. History of Furniture Style slides and intro

February 9 Fri. Dovetail joint Dovetail

February 14 Wed. Wood/Plywood/Behavior of Wood Furniture Sketch

February 16 Fri. Mortise and tenon, router, model Model

February 21 Wed. CAD/CAM stool seat /Pin up to present final furniture proposal

February 23 Fri. Milling lumber CNC Milking Stool

February 28 Wed. Working drawing

March 1 Fri. WOOD ORDER

March 6 Wed. Steam bending laminations DIVVY WOOD ORDER

March 8 Fri. Table saw instruction, begin milling parts

March 13 Wed. Glue ups, joining options FINAL WORKING DRAWING

March 15 Fri. BUILD

March 20 Wed.

May 16 Completed Piece