### 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, we will schedule a second meeting time for MArch students unable to attend the Friday class.

### Subject Description

Provides instruction in designing and building an original piece of furniture. First classes will survey the history of furniture making, understanding the wood properties and behavior, demonstrate woodworking techniques and students practice joinery. By March, final furniture design is resolved and building begins. Completion date is last day of classes. Limited to 12 students

**List of Subject Objectives**:

Develop woodworking techniques using traditional joinery and digital fabrication.

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

Draw section, plan, elevation detail

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 receive a failing grade.

There can be a moment in crafting when the maker, with a tool in hand, realizes a personal satisfaction, seeing their idea takes shape. You will enjoy the experience more by keeping the design simple. Building one piece will take the entire semester. It can take a significant amount of my time, providing personal instruction and often doing a portion of the building. It is important to be at every class to see the demonstrations. Procrastinating or putting off a demonstrated procedure, you may forget vital steps and mistakes happen.

The furniture will primarily be 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 carved surfaces.

Wear appropriate work clothing and foot wear.

No convertible furniture such as folding chairs, no cabinets.

**Schedule of Lecture, Projects, Assignments**

4.120 Furniture Making Syllabus

 Lecture/Work ASSIGNMENT

February 8 Wed. History of Furniture Style slides and intro

February 10 Fri. Dovetail joint Dovetail

February 15 Wed. Wood/Plywood/Behavior of Wood Furniture Sketch

February 17 Fri. Mortise and tenon, router, model Model

February 22 Wed. CAD/CAM stool seat /Pin up to present final furniture proposal

February 24 Fri. Milling lumber CNC Milking Stool

March 1 Wed. Working drawing

March 3 Fri. WOOD ORDER

March 8 Wed. Steam bending laminations DIVVY WOOD ORDER

March 10 Fri. Table saw instruction, begin milling parts

March 15 Wed. Glue ups, joining options FINAL WORKING DRAWING

March 17 Fri. BUILD

March 22 Wed.

May 16 Completed Piece