CFT A114: CONTEMPORARY CABINETMAKING

Item	Value
Curriculum Committee Approval Date	11/03/2021
Top Code	095420 - Plastics and Composites
Units	4 Total Units
Hours	108 Total Hours (Lecture Hours 54; Lab Hours 54)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	No
Grading Policy	Standard Letter (S)

Course Description

Introduction to wood and wood composites as a building material. Introduction to basic wood and machine tools to bring forth the structural and visual potential of the material. The basic skill set includes two-dimensional design and drawing concept development, furniture history, and studio practices. Two items are selected by the staff as a platform for skill mastery demonstration. Enrollment Limitation: CNST A114; students who complete CFT A114 may not enroll in or receive credit for CNST A114. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. Fabricate storage units featuring the hardware and wood composite components found in carcase construction in a variety of industrial and residential purposes.
2. Fabricate, finish, and install composite components.

Course Objectives

- 1. Identify materials and fabrication processes suitable for modern cabinetmaking and carcase construction
- 2. Identify types of lumber used in cabinetmaking
- 3. Identify types of hand tools used in cabinetmaking
- 4. . Identify power tools used in cabinetmaking.
- 5. Identify common joinery used in traditional and modern cabinetmaking.
- 6. Identify varieties of hardware used in the cabinetmaking trades.
- 7. design and construct a small solid wood cabinet using traditional joinery and hardware

Lecture Content

lab safety and tool maintenance Identify polymers, membrane technologies and wood composites hand and machine tool uses safe handling of construction materials structure of wood botanical classification building and construction timbers project #1 design (and problems) project #1 cut listing, construction options project drawing/rendering joinery strategy I joint making with hand tools joint stresses and failure joinery II joint making with power tools specialty joints joinery III project #2 (design and problems) lab sessions finish preparation electrical wiring principals principals of wood finishes applying finishes and coatings lab work sessions introduction to basic metallurgy composing with color and texture lab work sessions failed joint problem solving small studio business practices Submitting projects for critique (project #1 and #2)

Lab Content

lab safety and tool maintenance hand and machine tool uses safe handling of construction materials structure of wood botanical classification building and construction timbers project #1 design (and problems) project #1 cut listing, construction options project drawing/rendering joinery strategy I joint making with hand tools joint stresses and failure joinery II joint making with power tools specialty joints joinery III project #2 (design and problems) lab sessions finish preparation electrical wiring principals principals of wood finishes applying finishes and coatings lab work sessions introduction to basic metallurgy composing with color and texture lab work sessions failed joint problem solving small studio business practices Submitting projects for critique (project #1 and #2)

Method(s) of Instruction

- Lecture (02)
- DE Live Online Lecture (02S)
- Lab (04)
- DE Live Online Lab (04S)

Instructional Techniques

Lecture, demonstration, and lab assignments.

Reading Assignments

Reading assigned from instructor generated handouts and internet resources (approx 1.5 hrs/wk)

Writing Assignments

Written assignments detailing what has been found during project research assignments will be required. The information gathered for these assignments will also prepare students for the final exam. (3hrs/wk)

Out-of-class Assignments

Project research assignments will be given that will target various aspects of cabinet making, including aesthetic and structural design and several alternate methods. Other assignments include exam preparation. ((approx. 1.5hrs/wk)

Demonstration of Critical Thinking

Written exams, oral exams, and demonstrated skill mastery of primary mill work processes.

Required Writing, Problem Solving, Skills Demonstration

Lab proficiency demonstrations.

Eligible Disciplines

Cabinet making: Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience. Manufacturing technology (quality control, process control): Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience.

Other Resources

1. Handout materials to be provided and distributed by the instructor.