



El Camino College
COURSE OUTLINE OF RECORD – Official

Course Acronym:	CTEC
Course Number:	203
Descriptive Title:	Dedicated Use Cabinets
Division:	Industry and Technology
Department:	Construction Technology
Course Disciplines:	Construction Technology
Catalog Description:	<p>This course is one in a series of courses designed for students to develop a solid background in the fundamentals of woodworking technology. Topics include properties of wood products, fabrication and installation of residential dedicated use cabinets, correct construction techniques for specialty cabinets such as built in oven, appliance garage, pantry, and wine storage.</p> <p><i>Note: Completion of the degree or certificate requirements qualifies students to receive a maximum of two years credit toward the California State Contractor's License for the C-6 Cabinet, Millwork and Finish Carpentry examination.</i></p>
Prerequisite:	
Co-requisite:	
Recommended Preparation:	
Enrollment Limitation:	
Hours Lecture (per week):	1
Hours Laboratory (per week):	3
Outside Study Hours:	2
Total Course Hours:	72
Course Units:	2
Grading Method:	Letter Grade only
Credit Status:	Credit, degree applicable
Transfer CSU:	Yes
Effective Date:	03/18/2013
Transfer UC:	No
Effective Date:	
General Education: ECC	
Term:	
Other:	

	CSU GE:
	Term:
	Other:
	IGETC:
	Term:
	Other:
Student Learning Outcomes:	<p>SLO #1 S4S Stock Squaring</p> <p>Presented with a piece of rough stock, student will utilize correct squaring procedure to produce stock in S4S condition.</p> <p>SLO #2 Radial Arm Saw Cross Cut</p> <p>Using the radial arm saw, student will cross cut stock to specified lengths.</p> <p>SLO #3 Cooktop Cutout Calculation</p> <p>Referencing the manufacturer's specifications, students will calculate cutout for standard cooktop.</p>
Course Objectives:	<ol style="list-style-type: none"> 1. Complete a written comprehensive woodworking safety test with 100% accuracy. 2. Edge band plywood. 3. Set-up and use router to machine a rabbet cut. 4. Square rough lumber into usable stock. 5. Identify components of standard dedicated use cabinets. 6. Demonstrate ability to understand and interpret factory appliance cut out specifications. 7. Interpret perspective cabinet drawings.
Major Topics:	<p>I. OVERVIEW OF DEDICATED USE CABINETS (1 hour, lecture)</p> <ol style="list-style-type: none"> 1. A. Shop procedures 2. B. Vendors and suppliers C. Resources and references <p>II. ORIENTATION (3 hours, lab)</p> <ol style="list-style-type: none"> A. Cages and storerooms B. Toolroom C. Clamping and gluing area D. Finishing room E. Proper shop organization F. Clean-up procedures <p>III. SAFETY (2 hours, lecture)</p> <ol style="list-style-type: none"> 1. <ol style="list-style-type: none"> A. Safety procedures B. Safety test

IV. SAFETY (6 hours, lab)

1.
 - A. Proper operation of woodworking equipment
 - B. Safety concerns
 - C. Safe lab practices

V. DEDICATED USE CABINET DESIGN (1 hour, lecture)

1.
 - A. General specifications
 - B. Interpreting appliance specification sheets
 - C. Design
 - D. Orthographic projection
 - E. Dimensioning

VI. DEDICATED USE CABINET DESIGN (3 hours, lab)

1.
 - A. Creating design
 - B. Producing a drawing incorporating appliance cut-outs
 - C. Dimensioning cabinet

VII. MATERIALS (2 hours, lecture)

1.
 - A. Selection
 - B. Characteristics
 - C. Defects
 - D. Correction techniques
 - E. Surfacing procedure

VIII. MATERIALS (6 hours, lab)

1.
 - A. Selecting rough stock
 - B. Identifying defects
 - C. 7-step procedure to correct rough stock

IX. DEDICATED USE FACE FRAME (1 hour, lecture)

1.
 - A. Milling procedure
 - B. Joint selection

X. DEDICATED USE FACE FRAME (3 hours, lab)

- A. Dimensioning of stock
- B. Fabrication of joints
- C. Gluing and clamping
- D. Squaring

XI. CASEWORK SHEET GOODS (2 hours, lecture)

- A. Plywood
- B. Medium Density Fiberboard (MDF)
- C. Melamine
- D. Grades
- E. Proper handling

XII. CASEWORK SHEET GOODS (6 hours, lab)

- A. Proper handling techniques
- B. Table saw ripping techniques
- C. Panel saw cross cutting
- D. Final dimensioning

XIII. JOINTS (2 hours, lecture)

- 1.
 - A. Dado
 - B. Blind dado
 - C. Rabbet
 - D. Rabbet dado
 - E. Miter

XIV. JOINTS - SETTING UP AND MACHINING (6 hours, lab)

- 1.
 - A. Dado
 - B. Blind dad
 - C. Rabbet
 - D. Rabbet dado
 - E. Miter

XV. PLACEMENT OF APPLIANCES INCORPORATING ALLOWANCES FOR COUNTERTOPS (1 hour, lecture)

- 1.
 - A. Codes
 - B. Ergonomics
 - C. Dedicated use

XVI. PLACEMENT OF APPLIANCES INCORPORATING ALLOWANCES FOR COUNTERTOPS (3 hours, lab)

- 1.
 - A. Following code requirements
 - B. Identifying need and location for blocking appliances
 - C. Installing appropriate blocking

XVII. JIGS AND FIXTURES UNIQUE TO DEDICATED USE CABINETS (1 hour, lecture)

- A.

- A. Use
- B. Design
- C. Construction

XVIII. JIGS AND FIXTURES UNIQUE TO DEDICATED USE CABINETS (3 hours, lab)

- A.
 - A. Designing a jig as alternate method of cutting
 - B. Fabrication of jigs
 - C. Machine joints

XIX. ROUGH ASSEMBLY PROCEDURE (2 hours, lecture)

- A.
 - A. Glues
 - B. Mechanical fasteners
 - C. Biscuits
 - D. Screws, nails and staples
 - E. Clamping
 - F. Squaring technique

XX. ROUGH ASSEMBLY PROCEDURE (6 hours, lab)

- A.
 - A. Dry fit
 - B. Select glue and fastening techniques
 - C. Assembling
 - D. Clamping techniques
 - E. Final squaring

XI. FINAL FIT (2 hours, lecture)

- A.
 - A. Flush trimming techniques
 - B. Sanding techniques
 - C. Detail routing techniques

XXII. FINAL FIT (6 hours, lab)

- A.
 - A. Flush trim
 - B. Sand
 - C. Detail routing

XXIII. INSTALLATION PREPARATION (1 hour, lecture)

- A.
 - A. Support systems
 - B. Installation blocking
 - C. Backing
 - D. Scribe and trim molding

	XXIV. INSTALLATION PREPARATION (3 hours, lab) A. <ul style="list-style-type: none"> A. Installation of support members B. Cutting, fitting and installing blocking C. Identifying appropriate locations for backing and installing D. Milling, scribing and other trim molding
Total Lecture Hours:	18
Total Laboratory Hours:	54
Total Hours:	72
Primary Method of Evaluation:	3) Skills demonstration
Typical Assignment Using Primary Method of Evaluation:	Set-up the dado head to correct width to a specified shelf thickness. When completed, consult the instructor for evaluation.
Critical Thinking Assignment 1:	Using a panel saw, mill the materials for construction of a built in oven cabinet. When completed, Consult the instructor for evaluation.
Critical Thinking Assignment 2:	Interpret manufacturer's specifications of a drawing of appliance cut-outs. Specify the location and dimensions on the drawing. Submit drawing to the instructor.
Other Evaluation Methods:	Class Performance Objective Exam Performance Exams
Instructional Methods:	Demonstration Lab Lecture
If other:	
Work Outside of Class:	Required reading Skill practice Study
If Other:	
Up-To-Date Representative Textbooks:	Patrick Molzahn, William Umstattd and Charles Davis. <u>MODERN CABINETMAKING</u> . Goodheart Willcox Publishers, 6 th edition, 2023
Alternative Textbooks:	
Required Supplementary Readings:	
Other Required Materials:	Safety glasses Ear plugs Dust mask Closed toe shoes

Requisite:	
Category:	
Requisite course(s): List both prerequisites and corequisites in this box.	
Requisite and Matching skill(s):Bold the requisite skill. List the corresponding course objective under each skill(s).	
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Enrollment Limitations and Category:	
Enrollment Limitations Impact:	
Course Created by:	Jack Selph
Date:	10/09/2012
Original Board Approval Date:	03/18/2013
Last Reviewed and/or Revised by:	Jack Selp
Date:	02/15/2023
Last Board Approval Date:	07/17/2023 effective FALL 2024