



El Camino College
COURSE OUTLINE OF RECORD – Official

Course Acronym:	CTEC
Course Number:	230
Descriptive Title:	Cabinet Making Lab
Division:	Industry and Technology
Department:	Construction Technology
Course Disciplines:	Construction Technology
Catalog Description:	This course provides students the lab time and facility to take on more challenging projects in order to maintain and continue perfecting skills acquired in other construction technology courses. Students will focus on advanced cabinet fabrication techniques including machine joinery and use of jigs and fixtures. A work plan will be developed for efficient assembly, as well as incorporating final detail work and application of finishing materials.
Prerequisite:	Construction Technology 200 or Construction Technology 201 or Construction Technology 202 or Construction Technology 203 with a minimum of C or concurrent enrollment
Co-requisite:	
Recommended Preparation:	
Enrollment Limitation:	
Hours Lecture (per week):	
Hours Laboratory (per week):	4.5
Outside Study Hours:	0
Total Course Hours:	81
Course Units:	1.5
Grading Method:	Letter Grade only
Credit Status:	Credit, degree applicable
Transfer CSU:	Yes
Effective Date:	2/17/2015
Transfer UC:	No
Effective Date:	
General Education:	ECC
Term:	
Other:	

CSU GE:	
Term:	
Other:	
IGETC:	
Term:	
Other:	
Student Learning Outcomes:	<p>SLO #1 Dovetail Joint</p> <p>Students will setup template guides and fabricate a dovetail joint.</p> <p>SLO #2 Project and Self-Evaluation Presentation</p> <p>Students will be able to present their projects and self-evaluations to class.</p> <p>SLO #3 Planned Timeline</p> <p>Students will organize materials and processes to create a planned timeline.</p>
Course Objectives:	<ol style="list-style-type: none"> 1. Develop proficiency in machine fabricated dovetail joints. 2. Select and apply appropriate finish for intended use on a cabinet.
Major Topics:	<p>I. OVERVIEW OF LAB PROCEDURES (2 hours, lab)</p> <ol style="list-style-type: none"> A. Shop procedures B. Clean up assignments C. Purchasing woodworking supplies D. Recommending vendors <p>II. SAFETY IN THE SHOP (2 hours, lab)</p> <ol style="list-style-type: none"> A. Review B. Required safety test <p>III. SKILL BUILDING (74 hours, lab)</p> <ol style="list-style-type: none"> A. Work plan <ol style="list-style-type: none"> 1. Creating the steps to assemble project in proper sequence using project drawing B. Mill work C. Fabrication <ol style="list-style-type: none"> 1. Machining joints in preparation for assembly using table saw 2. Routing joints using jigs and fixtures 3. Cutting tenons utilizing tenoning jig and table saw

	<p>4. Routing dovetail joinery utilizing dovetail templates</p> <p>5. Using a tenoning jig to fabricate tenons for mortise and tenoning joints</p> <p>D. Assembly</p> <p>E. Gluing</p> <p>F. Clamping</p> <p>G. Detail work</p> <p>H. Sanding</p> <p>IV. FINAL PROJECT CRITIQUE (3 hours, lab)</p> <p>A. Student project presentation</p> <p>B. Class critique and discussion</p>
Total Lecture Hours:	
Total Laboratory Hours:	81
Total Hours:	81
Primary Method of Evaluation:	3) Skills demonstration
Typical Assignment Using Primary Method of Evaluation:	Design and build an advanced cabinet of your choice. Evaluation is based on class performance.
Critical Thinking Assignment 1:	Design and build a cabinet incorporating dovetail joinery in a drawer box construction. Evaluation is based on skill demonstration.
Critical Thinking Assignment 2:	Design and build a cabinet using the tenoning jigs to fabricate mortise and tenon joints. Evaluation is based on skill demonstration.
Other Evaluation Methods:	Class Performance Completion Presentation
Instructional Methods:	Demonstration Lab
If other:	
Work Outside of Class:	Course is lab only - minimum required hours satisfied by scheduled lab time
If Other:	
Up-To-Date Representative Textbooks:	No textbook is required.
Alternative Textbooks:	

Required Supplementary Readings:	Fine Woodworker, American Woodworker and Woodworker West
Other Required Materials:	
Requisite:	Prerequisite
Category:	sequential
Requisite course(s): List both prerequisites and corequisites in this box.	Construction Technology 200 or Construction Technology 201 or Construction Technology 202 or Construction Technology 203
Requisite and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s).	<p>Ability to operate woodworking equipment.</p> <p>CTEC 201 - Complete a written comprehensive woodworking safety test with 100% accuracy.</p> <p>CTEC 203 - Edge band plywood.</p> <p>CTEC 200 - Set-up table saw and rip plywood.</p> <p>CTEC 201 - Set-up and calibrate a dado head.</p> <p>CTEC 202 - Demonstrate use of band saw to cut kick plates.</p> <p>CTEC 200 - Set-up panel saw and crosscut plywood.</p> <p>CTEC 201 - Operate a nail gun on a face frame.</p> <p>CTEC 201 - Demonstrate plate joinery in case construction.</p> <p>CTEC 202 - Machine a dado joint</p> <p>Understand gluing and clamping techniques.</p> <p>CTEC 203 - Edge band plywood.</p> <p>CTEC 201 - Demonstrate the gluing procedure used for dowels and face frames.</p> <p>CTEC 202 - Demonstrate the gluing procedure used on a dado joint.</p> <p>CTEC 200 - Demonstrate gluing procedure for butt joints.</p>
Requisite Skill:	
Requisite Skill and Matching Skill(s): Bold the requisite skill(s). If applicable	
Requisite course:	

Requisite and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s).	
Requisite Skill:	
Requisite Skill and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s). If applicable	
Enrollment Limitations and Category:	
Enrollment Limitations Impact:	
Course Created by:	Jack Selph
Date:	08/24/2014
Original Board Approval Date:	02/17/2015
Last Reviewed and/or Revised by:	Jack Selph
Date:	03/02/2022
Last Board Approval Date:	04/18/2022