

## **MODULE OVERVIEW**

This module provides an introduction to the materials, tools, and methods used in cabinetmaking. Practice projects are included to help trainees learn the various joining techniques used by cabinetmakers, while providing practice on stationary power tools.

## **PREREQUISITES**

Please refer to the Course Map in the Trainee Module. Prior to training with this module, it is recommended that the trainee shall have successfully completed *Core Curriculum* and *Carpentry Fundamentals Level One*.

## **OBJECTIVES**

Upon completion of this module, the trainee will be able to do the following:

1. Recognize the common types of woods used to make cabinets.
2. Correctly and safely use stationary power tools.
3. Identify and cut the various types of joints used in cabinetmaking.
4. Build a cabinet from a set of drawings.
5. Install plastic laminate on a countertop core.

## **PERFORMANCE TASKS**

Under the supervision of the instructor, the trainee should be able to do the following:

1. Use stationary power tools to make joints commonly used by cabinetmakers.
2. Build a cabinet from a set of drawings.
3. Install plastic laminate on a countertop core.

## **MATERIALS AND EQUIPMENT LIST**

Overhead projector and screen	Countertop base and backsplash
Transparencies	Contact cement
Blank acetate sheets	Dowels or similar objects to prevent contact between laminate and countertop cemented surfaces
Transparency pens	Scrap lumber, including:
Whiteboard/chalkboard	1 × 4
Markers/chalk	1 × 6
Pencils and scratch paper	2 × 4
Appropriate personal protective equipment	Scrap piece of ¼" lauan plywood
Examples of woods, plywood, particleboard, and other materials used in cabinet construction	Wood glue
Examples of cabinet doors and drawers	Biscuits and dowels
Shaper cutting heads	Basic carpenter's tool box
Samples of cuts made with a shaper	Framing square
Assortment of cabinet door, drawer, and shelf hardware	Level
Examples of joints commonly used by cabinetmakers	Block plane
Examples of plastic laminate and solid-surface materials used for countertops	Assortment of clamps
	Sawhorses

Router/laminate trimmer and assorted bits  
Samples of various cuts that can be made with a router  
J-rollers  
Saber saw and blades  
Belt sander and various abrasives  
Rollers/brushes for applying contact cement  
Biscuit jointer  
Brad gun  
Table saw and operator's manual  
Radial arm saw and operator's manual  
Several grades of sand paper  
Semi-finished pieces  
Compound miter saw and operator's manual  
Jointer-planer and operator's manual  
Router table  
Disc sander  
Thickness planer

\*Located in the Test Booklet.

Samples of wood stock before and after using a thickness planer  
Drill press  
Scroll saw or band saw  
Wood sealers  
Wood filler  
Cabinet doors or cabinet door literature  
Door hinges or literature  
Door catches or literature  
Door pulls and knobs or literature  
Carpentry Levels 3 & 4 Video Package. Video 2: *Interior Carpentry: Ceilings/Cabinets (optional)*  
TV/DVD/VCR player (*optional*)  
Set of drawings from Appendix B, "Cabinetmaking Projects"  
Module Examination\*  
Performance Profile Sheet\*

## **SAFETY CONSIDERATIONS**

Ensure that the trainees are equipped with appropriate personal protective equipment and know how to use it properly. Emphasize basic site safety. This module may require trainees to visit job sites. Make sure that all trainees are briefed on site safety procedures.

## **ADDITIONAL RESOURCES**

This module is intended to present thorough resources for task training. The following reference works are suggested for both instructors and motivated trainees interested in further study. These are optional materials for continued education rather than for task training.

Cabinet Makers Association website, [www.cabinetmakers.org](http://www.cabinetmakers.org)

Kitchen Cabinet Makers Association website, [www.kcma.org](http://www.kcma.org)

Mill's Pride Cabinetry website, [www.millspride.com](http://www.millspride.com)

*Carpentry Levels 3 & 4 Video Package. Video 2: Interior Carpentry: Ceilings/Cabinets.* NCCER, Upper Saddle River, NJ: Prentice Hall.

*Hand and Power Tools, OSHA 3080, 2002.* US Department of Labor. Washington, DC: US Government Printing Office.

## TEACHING TIME FOR THIS MODULE

An outline for use in developing your lesson plan is presented below. Note that each Roman numeral in the outline equates to one session of instruction. Each session has a suggested time period of 2½ hours. This includes 10 minutes at the beginning of each session for administrative tasks and one 10-minute break during the session. Approximately 30 hours are suggested to cover *Cabinetmaking*. You will need to adjust the time required for hands-on activity and testing based on your class size and resources. Because laboratories often correspond to Performance Tasks, the proficiency of the trainees may be noted during these exercises for Performance Testing purposes.

Topic	Planned Time
<b>Session I. Introduction, Woods, Tools, and Joints</b>	
A. Introduction	_____
B. Woods and Materials Used in Cabinet Construction	_____
<b>Sessions II and III. Power Tools</b>	
A. Shop Tools Used in Cabinetmaking	_____
B. Laboratory	_____
Trainees practice safely using stationary power tools.	
<b>Sessions IV and V. Joints</b>	
A. Joints	_____
B. Laboratory	_____
Trainees practice using stationary power tools to make joints commonly used by cabinetmakers. This laboratory corresponds to Performance Task 1.	
<b>Sessions VI through VIII. Cabinet Construction</b>	
A. Assembling the Cabinet	_____
B. Laboratory	_____
Trainees practice building a cabinet from a set of drawings. This laboratory corresponds to Performance Task 2.	
C. Sanding and Finishing	_____
<b>Sessions IX and X. Countertops</b>	
A. Plastic Laminate	_____
B. Laboratory	_____
Trainees practice installing plastic laminate on a countertop core. This laboratory corresponds to Performance Task 3.	
<b>Session XI. Cabinet Doors, Drawers, and Hardware</b>	
A. Cabinet Doors and Drawers	_____
B. Cabinet Door and Drawer Hardware	_____
C. Cabinet Shelves and Shelf Hardware	_____
D. Mass-Production Cabinetmaking	_____
<b>Session XII. Review and Testing</b>	
A. Module Review	_____
B. Module Examination	_____
1. Trainees must score 70% or higher to receive recognition from NCCER.	
2. Record the testing results on Craft Training Report Form 200, and submit the results to the Training Program Sponsor.	
C. Performance Testing	_____
1. Trainees must perform each task to the satisfaction of the instructor to receive recognition from NCCER. If applicable, proficiency noted during laboratory exercises can be used to satisfy the Performance Testing requirements.	
2. Record the testing results on Craft Training Report Form 200, and submit the results to the Training Program Sponsor.	