

NR HILLER DESIGN INC
Custom Furniture & Cabinetmaking
nrhillerdesign.com

Built-in Cabinets: Design, Construction, and Installation

Instructor: Nancy R. Hiller

April 16-20, 2012

Tools to bring

A general note: Feel free to bring as many hand tools and small machines (such as a router) as you are able to transport. The following list includes essential tools but is not intended to be exhaustive.

Hand tools

Tape measure and pencils

Square (try, combination, or machinist's)

Framing square

Smoothing plane

Block plane

Tenon saw

Chisels—1/4", 1/2", 3/4" if possible

Wooden mallet

Rubber mallet

Hammer

Mortise gauge

Marking gauge

Hearing protection

Eye protection

Dust mask

Nail set

3-foot straightedge (if possible)

4-foot level (if possible)

Small equipment (You are encouraged to bring any of these that you are able to bring.)

Cordless drill and variety of twist and Forstner bits, if you have them

Impact driver

Jigsaw

Biscuit joiner

Kreg jig

Plunge router and flush-trim bit (can be a top-mounted bearing patternmaker's bit or a bottom-mounted bearing standard flush-trim bit)

Random orbital sander

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Syllabus

Please note: Actual classes may vary somewhat from this syllabus, depending on students' progress.

Monday

Presentation and discussion:

Designing built-in furniture and cabinetry

- How do built-ins differ from freestanding furniture?
 - A few examples of different styles and types of built-ins
- How do these differences affect design?
- What kinds of aesthetic and practical considerations should we keep in mind when designing built-ins?
- Don't forget to think about the style of kick, if applicable, and how your chosen style will affect construction and installation of the built-in furniture or cabinetry.

Hands-on work:

Cut basic case parts from veneer-core plywood

Cut joints for basic case: biscuit joints

Drill shelf support holes

Assemble basic case

Tuesday

Presentation and discussion:

Door design and different methods of construction

Different types of hinges and methods of fitting (i.e., inset, overlay, or half-overlay)

Hands-on work:

Face-frame construction using Kreg jig

Door construction: Mortise and tenon joinery; panel construction and fitting

Wednesday

Presentation and discussion:

Drawer design and various methods of construction

Important considerations relative to drawer mounting: Mechanical slides (different types) vs. traditional runners and kickers. For our sample cabinet we will use Blum Tandem undermount slides.

Hands-on work:

Drawer construction. (For this class we will use a rabbet and pin system of drawer joinery, since dovetails would take up too much time.)

Thursday

Hands-on work:

Fitting the door and drawer

Friday

Installation techniques

Tips for secure mounting

Leveling and plumbing cabinets

Scribing built-ins to fit their location