

Planning and Designing in Woodworking

Ch. 1

Pull out Modern Woodworking Textbook

Open to ch. 1

Planning Wood Products

Careful planning will avoid mistakes

Complete Plan:

1. select the project
2. develop design or refine design
3. prepare working drawings
4. developing procedures
5. list materials
6. estimate costs

Planning

Have knowledge of tools, materials,
construction

Pay careful attention to
demonstrations and presentations

Reference textbooks for questions/
instructor

Wood As a Construction Material

most popular, versatile raw material

Easily formed, shaped, and smoothed

Offers variety of tones, grain patterns,
and surface textures

Light and relatively strong

Easy for fasteners

Designing Wood Products

Design is an activity that includes creating, inventing, searching, and developing

Ideas recorded in words, drawings, models

Study similar designs

Record possible solutions in sketches

Design Factors

Functional-use and purpose of product, chair for chair not a tv,

Material and Methods- most appropriate materials that will work, durability, economy, beauty, strength

Appearance- visual aspect, must recognize proper balance, proportion, unity and harmony

Sketching

The ability to develop ideas through freehand sketching

Bar napkin, scrap paper most ideas flourish

Takes practice to get good at sketching, good skill

communicates ideas to customer, instructor, colleague

Presentation Drawing

Drawn with drafting instruments

Multiview projections show top, front,
right side drawings

Working Drawings

complete shape and size
requirements of product and various
parts

goal is to be able to build from it

Must include assembled views of
product, complete with all size and
location dimensions

Could be drawn to scale

Plan of Procedure

Prepared list of steps you follow in construction of project

Careful study of drawings and recognition of operations to be most efficient

Organizes work and prevents mistakes

Listed in outline form

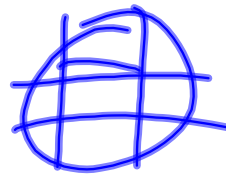
Bill of Material

detailed list of items you need to build the project

includes number of pieces, kind of wood, exact size, and name of part

Lists the dimensions of stock in this order, thicknessx widthx length

txwxL



Width is the dimension across the grain

Length is the distance along the grain

Thickness is the distance from edge to edge on one edge or end to end on one end or face to face distance

Bill of Material

Will list actual size of finished pieces

Stock cutting list will provide nominal sizes or rough cutting sizes

Activity

1. Develop bill of materials for cabinet
2. Complete and fill in.
3. Ask for instructors approval
4. Done? Begin

Bellwork?

$$\frac{T \times W \times L}{144}$$

1. How do we calculate board feet? ~~---~~
2. Pull out worksheet and begin working through that

Class Agenda

1. Bellwork
2. WS
3. Ch. 1 Reading and Questions

Divide & Conquer questions by people ,
show where answer is

4. Ch. 2 Discussion

