BC WOOD Cross-curricular Rubric

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<td>* Uses complete sentences, proper grammar, punctuation &amp; correct spelling</td>
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WEEKLY JOURNAL ENTRY

Textbook Chapter: One (1), Two (2), Ten (10), Eleven (11) Twenty one (21)
Pages: 13-21; 23-40; 107-116; 117-138; 316-321; 305-316
Project Booklet Pages: 4,5
Steps: BF Table

CLASSROOM LECTURE / DEMONSTRATION Notes
Class Room:
- Safety Manual Checked in
- Finished Week one Lecture
- Questions

How to fill out bill of materials
1. Give the piece a name
   a. Top
   b. Sides
   c. Web frame
   d. Ect……
2. Fill in the RGH Cutting Dimensions
   a. 2 - 1x12x27"
      i. Two pieces @ one inch by twelve by twenty-seven inches
   b. Make sure that boards are withing the limits of your RGH cuts.
3. Input data into RBF Formula
   a. \((P \times T \times W \times L) / 144\)
   b. \((P \times T \times W \times L') / 12\)
4. Output will be rough board feet
   a. Round up
   b. \((2 \times 1 \times 12 \times 27) / 144 = 4.5\) BF
5. Repeat for all pieces then sum total BF
6. SUGAR PINE costs $1.20 per BF

Cross-section of tree Trunk

- Annular rings indicate approximate years of tree+
- Sapwood is living part of tree
- Earlywood is the sections of the tree that experienced high growth
- Latewood is the section of the tree that experienced stunted growth
- Piff is the oldest part of the tree

Milling methods
1. Felling
   a. Harvesting the trees
      i. Sectional
      ii. Systemic
2. Cutting
a. Straight cut
   Straight cut

b. Plain cut
   Plain cut

c. Drying
   i. Kiln Drying (KD): utilizes an oven to dry the boards fast and high output
   ii. Air Dry (1yr/inch): dries naturally but slow
   iii. Solar Drying: new tech efficient and green

**Compound sliding Miter Saw**
1. Always check safeties and guards
2. Inspect blades for dullness or chips
3. Disengage locks and test machine motor
4. Secure piece to be cut
5. Engage motor and pull down on handle
6. Once blade cut through thickness of board push back and cut width
7. Lock saw back into place

**Table Saw**
1. Always check safeties and guards
2. Inspect blades for dullness or chips
3. Set the rip fence to desired length
4. Rip boards with the grain never against without sliding fence
5. Have a partner spot you and push board slowly into blade partner should assist in passing boards to cutter

Jointer
1. Always check safeties and guards
2. Inspect blades for dullness or chips
3. Do not make any adjustments to blades
4. If cleaning a face use paddles
5. Apply equal even pressure to board and run at a slow moderate speed
6. Too fast and board won't be cleaned properly, too slow and board will burn
7. Check clean for flatness
8. Only clean upto 80%

TEXT:
Chapter 1 Intro to cabinet making
  1. Function and form
  2. Material Decision
     a. Lumber
     b. veneer
     c. plastic
     d. ceramic
  3. Tooling
  4. Processes
  5. Producing cabinetry
  6. Quality and Productivity

Chapter 2: Cabinetry Styles
  1. Progression of styles
     a. Early styles (traditional)
        i. Heavy
        ii. Highly carved
        iii. Weak legs
     b. Provincial (people across country side)
        i. Reduced weight
        ii. Less carving
        iii. Cheaper
     c. Contemporary
        i. Curves
2. Early Cabinet Making
   a. Simple
   b. Designed to be moved a lot
   c. Simple fasteners and easily fit narrow doors

3. Modern cabinetmaking
   a. Fewer pegs and pins
   b. More moder products
      i. Hinge
      ii. Nuts
      iii. Bolts
      iv. Screws
   c. Little free hand carving
      i. Mass production
      ii. Routers and templates do most carving

4. Traditional Styles
   a. William and Mary
      i. Gate legs
      ii. Curved decorated edge
   b. Queen Anne
      i. Cabriole legs
      ii. High art
   c. Chippendale
      i. Multiple sources
         1. Chinese
         2. French
         3. English
      ii. Resembles queen anne
   d. Hepplewhite
      i. Curved doors and drawers
      ii. Chair backs look like open shields
   e. Sheration
      i. Twin beds
      ii. Kidney shaped tables
      iii. Secret...y
         1. Bookcase with hinged door front

5. Provincial Styles
   a. American Colonial
      i. Crude
      ii. Slight Chippendale influence
b. French
   i. Graceful curved edges
   ii. Cabriole legs

c. Pennsylvania Dutch
   i. Straight line
   ii. Square edge
   iii. Painted
      1. Animals
      2. People
      3. Fruits
      4. Flowers

d. Shaker
   i. Plain
   ii. Few to no decorations
   iii. Swivel tilt back chairs

6. Contemporary styles
   a. Early Americans
      i. Curved edges
      ii. Mechanical components
      iii. Pegs and pins visible
   b. Modern American
      i. Clean undecorated
      ii. Legs slightly tapered
      iii. No small parts
   c. Oriental modern
      i. Straight sided
      ii. Curved legs

7. Coordinating Styles
   a. Single rooms
      i. Each room follows a style
   b. Multiple rooms
      i. Free standing cabinetry
   c. Interiors and exteriors
      i. Rectangular
      ii. English tudor
      iii. Spanish homes
      iv. Contemporary

Chapter 10 Wood Characteristics
1. Tree parts
a. Roots
   i. Tap
   ii. Fiborus
b. Trunk
   i. Support
   ii. Transport water and nutrients
c. Crown

2. Properties of wood
   a. Appearance
   b. Color
   c. Grain pattern
   d. Moisture content

3. Shrinkage
   a. 1/30" for every percent point
   b. Shrinkage = wet-dry/wet

4. Mechanical Properties
   a. Strength
   b. Elasticity

Questions answers

1. 

2. Sapwood
3. Heartwood
4. A. the fall
5. A. Hardwoods are harder than soft
6. A piff surrounded by annular rings
7. Width length and thickness
8. Moisture content, appearance, color, grain, texture
9. Shrink
10. Free water can evaporate
11. It can warp
12. It can shrink
13. Moister content
14. Tangential direction
15.

16. OVEN DRY WEIGHT/WIGHT OF DISPLACED WATER
17. Reaction wood
18. Orientation of grain
19. Strength and elasticity
20. Sanding

Chapter 11: Lumber and Millwork
1. Harvesting
   a. Sectional felling
   b. Systemic felling
   c. Sawing
2. Plain sawing
   a. Cuts are tangent to annular rings
   b. Less cost less waste
3. Quarter sawing
   a. Twists and cups less
   b. More expensive
4. Drying
   a. Air dry
      i. Stacked and separated by strips
      ii. 15-19%
   b. Kiln
      i. Large oven
ii. 5-10%

5. Defects
   a. Knots
   b. Pitch pocket
   c. Bark pocket
   d. Grub damage
   e. Heartrot
   f. Warp
   g. Checks and splits
   h. Shakes
   i. Honeycomb
   j. Blue satin
   k. Decay
   l. Insect damage

6. Machine defects
   a. Wavy dressing
   b. Dog holes
   c. Machine burn
   d. Raised grain
   e. Torn grain
   f. Torn grain-saw.

Questions
1. It can grow
2. Sectional and systemical
3. Plain, and quarter
4. Moister content
5. 19%
6. Intergrown, encased checked spike knot hole
7. Blue satin Decay Insect damage

8.
9. Softwood species texture
10. Burning
11. Aselect Bselect Cselect Dselect
12. Light framing grades
13. Factory and shop grade
14. Appearance and mc
15. 6-12
16. FAS
17. weight
18. 2
19. 8.164
20. Varying amounts of surface area

Chapter 21 Sawing with stationary power machines
1. Handedness
   a. Left handed
   b. Right handed
2. Sawing straight lines
   a. Reduces stock to work piece
   b. All corners are 90°
3. Tilting arbor table saw
   a. Horizontal table
   b. Circular blade that extends up through a table insert
   c. Tilting arbor that adjust from 0 to 45 degrees
4. Sliding table
   a. Improves accuracy
   b. Easier handling of large material
5. Blade Guard
   a. Keeps hand away from blade
   b. Controls sawdust
6. Operating table saw
   a. Ripping lumber Cutting along grain
   b. Ripping plywood
   c. Crosscutting
   d. Resawing
   e. Ripping thin strips
   f. Radial arm saw
7. Sawing curved lines
   a. Use band saw or scroll
   b. Relief cuts
WEEKLY JOURNAL ENTRY: Your entry is a reflection of your learning experience in the classroom specific to that day. What goals did you set for yourself and accomplish. What were your successes and any setbacks that you encountered? How did you successfully problem-solve any setbacks and turn them into positive learning experiences. What goals are you setting for yourself for next class session's learning experience? What were your accomplishments relative to your classroom project?

This week we finally started cutting wood. It was our tops. We pieced several parts and learned surfacing techniques, in class. I am caught up and taught how to remove imperfections in wood. We got our lengths cut and knots presented. I cut my pieces a little short but overall it looks ok. I have learned a lot about machines this week and am pleased with the class progression.