## **Recommended Tool List:**

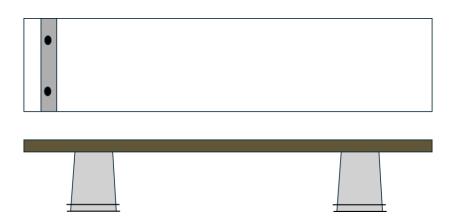
Sharpening Tools					
Sharpening Stones	Leather Strop w/ Green Honing				
One Course Stone 300-600 Grit	Compound				
One Fine Stone 1000-1500 Grit	·				
Marking & Measuring Tools					
Marking Knife	Scratch Awl <b>OR</b> Bird Cage Awl				
Dividers <b>OR</b> Compass	6' Folding Rule <b>OR</b> Tape Measurer				
Chalk Line <b>OR</b> Ink Line	Combination Mortise/Marking Gauge				
Try Square <b>OR</b> Combination Square	Bevel Gauge				
Protractor	Pencil				
Hewing					
Axe – (Double Bevel or Single Bevel) <b>OR</b> Adze					
Draw Knife (Optional)	Froe (Optional)				
Sawing					
Rip-Cut Saw	Cross-Cut Saw				
Joinery Saw	Bow Saw or Coping Saw (Optional)				
Planing					
Smoothing Plane	Scrub, Jack, or Fore Plane (Optional)				
Jointer Plane (Optional)	Spoke Shave (Optional)				
Chiseling					
Bevel Edge Chisels ( ¼", ½", ¾", & 1") Mortise Chisel ¼", 5/16", or 3/8"(Option					
Joiner's Mallet <b>OR</b> Carver's Mallet					
Boring					
Bit Brace w/ Auger Bits <b>OR</b> Electric Drill w/ Spade Bits					
Twist Drill Bits (Optional)	Brad Point Drill Bits (Optional)				
Rasps and Files					
Rattail (Round) File	Triangle File				
Half-Round File	Mill (Flat) File				
Rattail (Round) Rasp	Flat Rasp				
Half-Round Rasp	Needle File Set (Optional)				
Finishing					
Card Scraper & Burnisher Sanding Block w/ Sandpaper					

MATERIALS CONTINUED ON NEXT PAGE

Materials				
Quantity	Description			
2	2"x6"x2'			
2	Split Piece of Firewood			

Students need a work surface for this class consisting of a workbench and a hewing stump.

If the student does not have a workbench a temporary workbench may be made by nailing or screwing a thin board (1/4"x 2"x11") across a 2"x12"x8' board and resting it on two upside-down paint buckets or milk crates. A hewing stump is a cut-off of a log that is 10"-24" in diameter and should be positioned at a comfortable height to minimize bending over.



## **Reference Material Links:**

Wood Handbook: Wood as an Engineering Material <a href="https://www.fpl.fs.usda.gov/documnts/fplgtr/fplgtr282/fpl">https://www.fpl.fs.usda.gov/documnts/fplgtr/fplgtr282/fpl</a> gtr282.pdf

How to Use Wood-Working Tools – Ginn & Heath

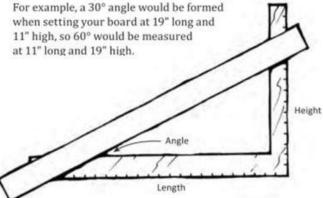
https://archive.org/details/woodworkingtools00indu\_0

## Saw Sharpening Basics

https://www.blackburntools.com/articles/sharpening-pdfs/saw-sharpening-basics.pdf

## Angle calculator

Here is a list of angles that can be easily formed with a straight board across a carpenter's square. For the desired angle, set the board at the length and height marks listed and clamp into place. All the angles shown in the table are accurate within 1/4 of a degree. For angles larger than 45°, just exchange the height and length.



Angle	Length	Height	Angle	Length	Height
3°	19"	1"	23°	19"	8"
4°	14"	1"	24°	9"	4"
5°	23"	2"	25°	15"	7"
6°	19"	2"	28°	15"	8"
7°	8"	1"	29°	9"	5"
8°	7"	1"	30°	19"	11"
9°	19"	3"	31°	5"	3"
10°	17"	3"	32°	8"	5"
11°	21"	4"	33°	20"	13"
12°	14"	3"	35°	10"	7"
13°	13"	3"	36°	11"	8"
14°	4"	1"	37°	4"	3"
15°	15"	4"	38°	9"	7"
16°	7"	2"	39°	16"	13"
17°	23"	7"	40°	19"	16"
19°	23"	8"	41°	15"	13"
20°	11"	4"	42°	10"	9"
21°	13"	5"	43°	15"	14"
22°	5"	2"	45°	1"	1"
22.5°	17"	7"			