

Teacher's Guide
Introduction to Wood Turning
(Woodturning 101)

The following course outline cover the average class schedule.. While economics may dictate shorter or allow longer sessions the following are the core activities. More advanced student may attempt the candle stick project.

<u>Units</u>	<u>Hours</u>
Session 1	3
Introduction to facilities, ground rules	
Introduction, safety on the lathe	
Roughing out between centers	
Planning cuts with the skew chisel	
Session 2	3
Review of session one	
Beginning practice with shallow fluted gouge –turning beads	
Practice with shallow fluted gouge – turning beads	
Introduction to turning coves	
Session 3	3
Demonstrate Bead & Cove Stick (foot massagers)	
Students create project	
Session 4	3
Demonstrate turning a tool handle	
Student activity: Turning a screw driver handle	
Session 5	3
Demonstrate turning bottle stopper	
Student activity: turning a bottle stopper	
Session 6	3
Demonstration turning a 7 mm pen	
Student activity: Turning a wood pen on a mandrel	
Session 7	3
Demonstration layout of a bud vase	
Student activity: start a bud vase project	
Session 8	3
Completing the bud vase activity	
Continued	
Session 9	3
Demonstration lathe maintenance	
Student activity: Complete all projects	
Students complete lathe maintenance	
TOTAL HOURS	27

Introductory lecture for all woodturning classes

- Welcome
 - Introductions
 - Introduce self and qualifications
 - Introduce assistants and describe their role
 - Participant introductions
 - Allow all participants to introduce themselves and state expectations/experience
- Sign in procedures
 - Must sign in at beginning of each session
 - Provide e-mail address for our data base
 - May check if they do not wish to receive class announcements
 - First day must complete TOPS form *front & back*
 - Appoint an assistant to check TOPS against class list
 - Complete a name tag each session and wear
 - Work stations will be assigned by the instructor at an appropriate time
- Safety procedures
 - Personal safety
 - During class all students must wear appropriate eye protection
 - No open-toed shoes
 - No long sleeves
 - No loose jewelry
 - Work station safety
 - Do not lay tools on lathe or under lathe – place in appropriate holders
 - Keep sawdust away from foot area
 - Inform staff of any mechanical malfunctions immediately
 - No power tool operation prior to official starting time of class
 - Sanding of project will be kept to a minimum, consider take the completed project home for sanding and finishing
 - Room safety
 - Emergencies
 - Immediately inform your instructor of and accidents or illnesses
 - Eye wash and first aid kits are in the room
 - Follow all instructions
 - In room telephone can reach emergency personnel
 - Dial 9-8-911
 - Front office is immediately informed of all accidents or medical conditions
 - Safety drills
 - Fire or 'secure in place' drills may be conducted unscheduled
 - Fire drill
 - Turn off all equipment

- Follow the teaching assistant to the assigned staging area (out the front door only, turn left, go to the far side of the parking lot)
 - Instructor will assure room is clear
 - Instructor picks up the daily sign in sheet
 - Instructor will hang the “clear” sign on the outside of the main door and proceed to staging area
 - Secure in place
 - Turn off all equipment
 - Take a seat in the center of the room and remain quiet
 - DO NOT EXIT THE ROOM
 - Instructor will lock both doors
 - EVERYONE REMAINS IN PLACE UNTIL ALL CLEAR IS SOUNDED
- Goals & Objectives
 - Describe goals of course
 - Knowledge and skills training not project completion
- Tools and sharpening
 - Student are encouraged to bring their own tools for use in class
 - When sharpening your tools, use our setting or sharpen only on the third, adjustable grinder
 - Do not re-adjust the sharpening fixtures in the classroom
 - The 16 inch band saw is not to be operated by any student without assistance from staff or until the student is cleared to do so
- Weekly work process
 - Sign in/name tags
 - Prepare for opening lecture/demonstration by instructor
 - Bring work books to all classes (replacement can be downloaded from www.jlrogers.com)
 - Personal tools and safety gear encouraged
 - Do not undertake an activity that has not been introduced or described
 - When in doubt – ask
- Clean up
 - Everyone participates in room clean up
 - Clear all lathes of debris
 - Clean up sharpening stations and instructor lathe
 - Sweep the floor into trash cans
 - Vacuum lathes last
 - Instructor makes room area assignments for clean up
 - Replace all tools and accessories into appropriate cabinet location, drawer or cart location
- Special accommodations

- To the best of our ability we will attempt to accommodate special physical needs
 - Please inform your instructor of special accommodations required
- If you plan on missing any session please inform the instructor
 - We may have time at the end of the semester to allow for some makeup activity but this is not guaranteed
 - The class proceeds each week with knowledge and skill training

Materials/Room setup

Session	Topics	Setup	Prep	Buy
1	<ul style="list-style-type: none"> Complete paper work <ol style="list-style-type: none"> TOPS form Release of responsibility Confirmation of registration Handout student materials, review with students Discuss lathe selection/assignments Explain cleanup procedures Safety lecture Introduction, safety on the lathe Roughing out between centers <ol style="list-style-type: none"> Use SRG ABC of wood turning Plaining, “V”, cut with the skew chisel Parting cuts Beginning practice with shallow fluted gouge beads 	<ol style="list-style-type: none"> Spurs and live centers Center finders Calipers Rulers Set lathe speed = 1800 Prepare practice stock 	Sharpen tools Clean face shields Cut practice stock to 10”	Practice stock
2	<ul style="list-style-type: none"> Review week one Introduce coves with the shallow fluted gouge Continue practice 	<ol style="list-style-type: none"> Same as week one 	Sharpen tools	More practice stock
3	<ul style="list-style-type: none"> First project: Foot Massager Demonstrate project Review handout instructions Explain project layout and markup 	<ol style="list-style-type: none"> Same as week one Sand paper 	Hardwood blanks 2x2x6	Hardwood for blanks
4	<ul style="list-style-type: none"> Tool handle project Discuss objectives of project Introduce the four-jaw scroll chuck Introduce drilling on the lathe 	<ol style="list-style-type: none"> Screwdriver kits Jacobs chuck with appropriate drills CA glue Walnut oil finish Paper towels 	<ol style="list-style-type: none"> 2x2x7 blanks Disassemble screwdrivers Grind away the tabs on the shafts 	Cheap screwdrivers 2x2x7 hardwood blanks
5	<ul style="list-style-type: none"> Demonstrate bottle stoppers turning Demonstrate Friction polish (demonstrate Beall buffing system) 	<ul style="list-style-type: none"> 3/8 collet chucks and draw bars to match lathes Stopper blanks Friction polish Blue shop towels to apply 	Cut stopper blanks Drill 3/8 hole in blank Cut 3/8 dowels to 2 inch length Pre-glue dowels into blanks Place collet /draw bars in lathes	3/8” maple dowels Stopper blanks Pre-drilled Corks
6	Demonstrate all steps of turning pens <ul style="list-style-type: none"> Refer to detailed instructions in activities HO First kit and blank free More kits \$2.50 each Students use pre-cut blanks for fist project, then cut their own 	<ol style="list-style-type: none"> Mandrels w/ bushings DP w/ 7mm drill Disk sander with 90 degree fixture for squaring blanks Sand paper CA glue pen press BS w/ cutting sled finish /w cloth 	Cut/drill blanks Mark center line Lay out pen kits Mandrels Pen press 7 mm drill and chuck Setup disc sander Medium/thick CA glue Accelerator Prep table for applying glue (aluminum sheets)	Cut .3/4x3/4x5 pen blanks Cloth for finishing Pen kits Rough sandpaper Sanding supplies to 400 grit Medium CA glue Hut Crystal coat finish

7	Bud vase project <ul style="list-style-type: none"> • Rough out • Add tendon • Xfr to chuck • Layout with calipers • Turn shape top half of shape 	1. calipers 2. rulers 3. MT #2 drills 9. sand paper	Cut blanks to 3x3x9"	3x3x9" hardwood stock
8	Bud vase project <ul style="list-style-type: none"> • Drill/ complete neck • Sand • Part off 	4. Same as above	More blanks as required	
9	Student project completion <ul style="list-style-type: none"> • Students should complete all unfinished work Introduce lathe maintenance steps <ul style="list-style-type: none"> • Clean ways, silicone spray • File tool rests, spray • File, adjust tail stock quills • Adjust Nylock nuts as required • List additional repair needs Administer final Course evaluation	Maintenance supplies Silicon spray Files crescent wrenches Sand paper paper towels gloves Evaluation forms	<ul style="list-style-type: none"> • Tools as required Photocopy evaluation forms	List additional repair parts that are required