# "The Fine Art of Woodturning" P.O. Box 19065 - Boulder, CO 80308 - ph: 303-449-7170 - cindy@cindydrozda.com - www.cindydrozda.com

# Preparation Instructions For the participants of Cindy Drozda Signature Workshops

**Subject: Woodturning Essentials** 

# **Workshop Goals:**

My main goal for all of my workshops is to help members of the Woodturning community to become better woodturners and artists. I do this through sharing the methods, techniques, and design philosophy that I use in my own work.

Another goal is to give participants the experience with me that they are looking for. For many, that is to learn the tool control that makes it possible to do fine work.

You are to be congratulated for your willingness to learn from me! It is through exposure to other turners that we all share and grow, as individuals and as a group. Your turning and artwork will improve as a result, no matter what your turning experience level at the moment. I attend other turners' workshops whenever I can. I always benefit from learning different ideas and ways of doing things.

This is your opportunity to step into my shoes, and experience the ways that I do my work. Everyone does things differently, and you may or may not decide to incorporate my ideas and methods into your own work. Having exposed yourself to new methods, processes, and philosophies will make you a better turner. You will have more options and more "tools" available for doing your own work.

### Subject:

The subject of this workshop will be Woodturning Techniques, the building blocks of all woodturnings. We will practice the basic cuts used in spindle and bowl turning, and then we will put those techniques together to make a project.

At the end of this document, I have included plans for a couple of projects that we might make. These projects are also good ideas for you to take into your own shop for practicing your skills.

#### Class Structure:

My workshops consist of short demonstrations of each step in the project, followed by time for the participants to complete that step. The focus will be on completing the process as a group.

We will have a morning session, a lunch break of about 1 hour, and an afternoon session. At the end of the day, we will leave the shop as clean as we found it. Hours of class will vary, depending on the facility that we are using. Usually, we spend a 6-7 hour day working at the lathe.

Please contact your club's representative for the hours of your class, and any other specific details.

# **Turning Experience Required:**

This workshop is the lesson, not the final exam! Your performance in class will not be graded or judged. We all learn at our own level and our own rate. It is the nature of clubs and guilds that the workshop participants will be at different levels. It's my job as instructor to challenge everyone at their level. All skill levels are welcome. No turning experience is required. This workshop is designed for turners with a minimum of experience. It is also a great tune-up for more advanced turners. A review of the basics helps us to un-learn bad habits and improve our skills.

# **Technical Preparation:**

You should be "current" with your own tools and methods. In other words, it will be better for you if you have turned something recently and are reasonably comfortable with what you currently do.

You don't need excessive practice, or instruction, to prepare for this workshop. The best time to schedule time in your shop to practice is in the weeks following the class, when you can put into action the ideas and methods that you learned, and make them your own.

# What to Bring to Class:

- 1 Safety eyewear, face shield, or goggles. This is important. Eyeglasses don't count unless they have protective side shields and ANSI spec safety lenses.
- 2 You do not need to bring wood. All of the wood will be provided.
- 3 Tools (list below) and any sharpening jigs that you like to use.
- 4 Sandpaper and finishing materials if you intend to finish your project.
- 5 A piece or two of your own finished work to show.
- 6 Your specific goal for this workshop.
- 7– To get the most out of this workshop: Please bring an open mind and willingness to learn!!

# **Suggested Tool List:**

I will be bringing extra tools to share, so if you don't already own some of these tools don't worry. Just bring what you have. It is a good idea to attend the workshop, and see if you want to do this work in the future, before buying new tools.

# **Important:**

# Face Shield or Safety Glasses – everyone must protect their eyes in this class! (regular eyeglasses don't count unless they have side shields!)

Bowl Gouge – any size
Parting tool (preferably **not** a "diamond") 1/16" - 3/16"
scraper for making chucking tenons
Scroll chuck with jaws to grip a 2" – 3 1/2" tenon.
Tailstock revolving center
Headstock drive center
Notepad & Pencil

**Optional:**(bring if you have them)

Drill chuck for tailstock with approx 1/2" bit

Cone point for tailstock center

smaller and/or larger bowl and/or spindle gouges

Beading and Parting tool 3/8" or 1/2"

Spindle Roughing Gouge

Skew

Center finder

Ruler

Awl

**Dust Mask** 

# **Safety First**

### 1 - Eye Protection

Should be worn whenever machines are running! You are only given one pair of eyes.... This is the only rule that should NEVER be broken! No excuses will restore your sight if you are blinded!

#### 2 - Hands Off

The spinning workpiece. Fingers can get caught between the toolrest and the spinning work. Not worth the risk!

### 3 - Stop the Lathe

Before making any adjustments to the tool rest, tailstock, etc. Just good sense. Fingers can be caught in dangerous places, and/or you could easily lose that piece that you spent hours working on.

### 4 – Loose clothing and/or jewelry

.... are a bad idea around any power equipment.

#### 5 - Listen

For any unusual sounds. It might mean the workpiece is about to fly apart, or the machine is damaged. Be aware of your surroundings!

#### The Woodturners Check List

### 1 – Fixing

....the workpiece to the lathe. - Check if Secure -

#### 2 - Toolrest

Standard toolrest height is about 1/4" below center. Adjust the toolrest for comfort and personal preference. – Clear -

# 3 - Speed

Generally, higher turning speeds give smoother easier cuts. – But - If there is excessive vibration, or if you're not comfortable, slow the machine down. – Check before turning machine on –

# 5 - Sharp

The cleanest cuts start with sharp tools. Develop a sharpening system that gives you consistent results and sharpen often. If the cut is not happening like you think it should, the tool is probably dull.

#### 4 - Grain

Be aware of the grain direction in the workpiece. Grain direction affects design and technique decisions.

### 6 - Technique

Choose the correct type of cut for the job. The easiest cuts have the cutting edge presented to the side grain (rather than the endgrain). Precise technique makes crisp, precise turnings.

#### 7 - Stance

Start in a position to finish comfortable. Weight should be evenly distributed over both feet. Shift body weight to move the tool through the cut.

#### **Resources for Woodturners:**

**Local Woodturning clubs - the ultimate sharing of woodturning knowledge.** Mentor programs, live demonstrations at meetings, local sources for wood and supplies.

**American Association of Woodturners – www.woodturner.org -** Our national organization, and our most extensive resource. Club and Instructor directory, quarterly magazine, education grants, annual symposium.

**AAW woodturning forums - www.aawforum.org –** A great resource for sharing ideas with other woodturners, asking questions, and seeing what the community is about.

**My website - www.cindydrozda.com. -** copies of my handout sheets, sources of supply, links, classes, etc.

# Dried Flower Vase Step by Step

### Tools needed:

Bowl gouge, Parting tool, Dovetail scraper, Drill chuck and bit, Scroll chuck, Drive and live centers

### Process:

Mount wood on Lathe between centers

Turn square to round – bowl gouge (or roughing gouge)

Cut chucking tenon – parting tool, dovetail scraper

Shape bottom curve of the Vase (creating space between bottom of vase and chuck) – bowl gouge

Tighten tenon into chuck

Face off blank – parting tool (or bowl gouge)

Drill hole (mark center first with tailstock or parting tool) – drill chuck

Support with tail stock cone center

Define rim – parting tool

Create shape – bowl gouge

Sand and finish

Part off at chuck end (undercut slightly) – parting tool

Saw through the last 1/4" of wood

Carve off nub (if necessary) and sand with disk in a drill press

# **Turning a Tool Handle**

Turning handles for your tools is a great way to build skills. It is also very satisfying to use something that you yourself have made, and it is an opportunity to customize the shape and length to your preferences. There are many ways to make tool handles. Here is the method that I use:

# 1 – Start with an appropriately sized piece of wood.

A good place to start is: 1 ½" square x 12" long. Relatively straight grain works best, and I would recommend a fairly hard wood, but I've seen and made tools from all kinds of woods as well as other materials.

#### 2 - Find or make a ferrule.

A short (3/4" or 1" or so) piece of copper, brass, or aluminum tubing makes a good ferule. There are also lots of options in the plumbing section of the hardware store (flare nuts, etc). And if you want to make it really easy, "official" ferrules are available at woodworking supply stores such as Woodcraft. David Nittmann makes a ferrule by wrapping string around the tenon and securing it with superglue.

3 – Mount the wood between centers with the end that you want the ferrule on at the tailstock.

# 4 – Rough the wood to a cylinder and make a tenon for the ferrule.

Trial fit the ferrule on by backing the tailstock away between cuts. The ferrule should fit up against a shoulder for best results.

# 5 – Shape the rest of the handle.

Anything goes! Personal preference for the shape where your hand will hold onto the tool is one guideline. Use your imagination and add beads, coves, and other decoration as desired.

#### 6 - Drill a hole for the tool of choice.

My favorite method for doing this is to start with a drill bit in a Jacobs chuck in the headstock. Then the tool's handle end is aligned onto the tailstock center and the ferrule end is aligned onto the tip of the drill bit. Hold onto the handle with one hand to keep it from spinning, turn the lathe on (low spindle speed), and advance the tailstock to drill the hole. This method will give you a good shot at the hole being drilled along the center axis of the tool (as opposed to at an angle, which looks funny but functions just fine).

### 7 – Finish off the end.

Here's where I have some personal preferences, and you will too, no doubt.

I like to just round over the end at the headstock, leaving the center mark on in case I want to mount the handle back on the lathe in the future. I would have done this step between steps 5 and 6, and would be done by now. If I only had a big drive center, and wanted a lot of rounding on the end, I might have chosen to reverse the piece on the centers (put the drive where the tailstock was and vice versa) to finish off the end.

The reason I put this step in last is because some turners like the end of the handle to look finished, without the drive center mark. The tool can be re-mounted in the lathe after drilling, using a cone in the tailstock to center in the tool hole. At the drive end, shape the end of the tool, leaving a small tenon that gets cut and sanded off after removing from the lathe.