



Hinges and Joints: Standard, Invisible, & Universal

Instructor: Tom Muir

Workshop Dates: July 31-August 4, 2023

WORKSHOP STUDENTS should bring the following materials for the workshop

*It is recommended that you wait to hear if the workshop is running before you purchase materials. Touchstone will let you know if a workshop is running no later than 2 weeks before the start of the class. Regardless of the outcome of the class, running or not, Touchstone is not responsible for the reimbursement of any materials bought for a workshop.

- 1) 4 x 4", 16 gauge bronze, brass, nu-gold, OR nickel silver. NO COPPER
<https://www.riogrande.com/product/Bronze-6-x-12-Sheet-16-Ga-Dead-Soft/134550>
- 2) 4 x 4", 18 gauge bronze, brass, nu-gold, OR nickel silver. NO COPPER
<https://www.riogrande.com/product/Bronze-6-x-12-Sheet-18-Ga-Dead-Soft/134551>
- 3) Saw frame with 4" minimum throat depth
<https://www.riogrande.com/product/german-adjustable-jewelers-6-saw-frame/110007>
- 4) Needle files (set of 6 or set of 12, 1-2 cut)
<https://www.riogrande.com/product/Friedrich-Dick-Needle-File-Set-Cut-2-Set-of-6/114797>
- 5) 6" half round file, approx. 0 cut and/or 2 cut
<https://www.riogrande.com/product/Glardon-Vallorbe-Precision-Half-Round-Hand-File-Swiss-Cut-0/114928>
- 6) Pliers: chain-nose
<https://www.riogrande.com/product/chain-nose-pliers/111911>
- 7) Pliers: flat-nose
<https://www.riogrande.com/product/flat-nose-pliers/111912>
- 8) Tweezers with fine points
<https://www.riogrande.com/product/blue-heron-stainless-steel-precision-aa-pattern-tweezers/115018>
- 9) Soldering pick (coat hanger is fine)
- 10) Silver solder – wire: 1' hard
<https://www.riogrande.com/product/Silver-Wire-Solder-22-Ga-Hard/101711>
- 11) Silver solder – wire: 1' hard
<https://www.riogrande.com/product/Silver-Wire-Solder-22-Ga-Medium/101710>

- 12) 6 x ½" flexible metal ruler
<https://www.riogrande.com/product/steel-ruler-with-conversion-chart/116086>
- 13) Saw blades: size 2/0 or nearest size available, 4-6 dozen
<https://www.riogrande.com/product/laser-gold-2-0-saw-blade-pkg-12/110306>
- 14) Larger file such as 6-10" half-round, barrette or flat files
<https://www.riogrande.com/product/Glardon-Vallorbe-Precision-Flat-Hand-File-Swiss-Cut-0/114924>
- 15) Metal scribe or x-acto knife
- 16) Glass sheet, approximately 8 x 10" or larger: Local frame shop
- 17) Silicon carbide sandpaper: 1 sheet each of 220 or 240, 400 and 600 grits: Local hardware store.
- 18) Notebook/sketchbook

OPTIONAL SUPPLIES FOR STUDENTS:

- 1) 3" Starrett dividers
- 2) Starrett or machinist's square
- 3) Vernier gauge or digital calipers
- 4) Charcoal block(s). Hardwood preferred
- 5) Respirator with dust filter
- 6) Drill index(es): 1-60, 61-80
- 7) Drill press capable of accommodating #52 or smaller drill bit
- 8) Cutting broaches, sizes approximately .7mm – 3mm
- 9) Super glue
- 10) 4" joint round-edge to match o.d. of tubing, 2 cut Part # LP1170/LP1171 (2mm)
<https://www.ottofrei.com/Glardon-Vallorbe-Joint-Round-Edge-Precision-Files-LP1170-LP1171?quantity=1&custcol19=46>
- 11) 6" round parallel 2.4mm diameter, 0 or cut
<https://www.ottofrei.com/Glardon-Vallorbe-Round-Parallel-Precision-Files-LP1669>
- 12) 8-10 #00 cut barrette file
- 13) 8 – 10" narrow or extra-narrow pillar, 0 or 2 cut Part # 131.223GR
<https://www.ottofrei.com/Grobet-Narrow-Pillar-Precision-Files>

- 14) Part # 131.201GR:
<https://www.ottofrei.com/Grobet-Extra-Narrow-Pillar-Precision-Files>
- 15) 10" regular pillar, 0 or 2 cut #LP1132
<https://www.ottofrei.com/Glardon-Vallorbe-Pillar-Precision-Files-LP1132>
- 16) Parallel-action pliers
- 17) Joint vise/mitre cutter: Bergeon or less expensive model
<https://www.ottofrei.com/Bergeon-6499-Jig-Vise-Miter-Cutter-Swiss-Made>
- 18) Hand-held sawing jig Part # 126.448
<https://www.ottofrei.com/Bergeon-6677-Hand-Held-Sawing-Jig>
- 19) Miter Jig and Vise: Part # 113596
<https://www.riogrande.com/product/miter-cutting-vise-and-jig/113596>
- 20) Wire twisting pliers: Available from Rio Grande
<https://www.riogrande.com/product/wire-twisting-tool-10/111281>