ANTIOCH
COLLEGE

Woodshop Safety Procedures

Department of Visual Arts – Woodshop

The wood shop is a facility located on the bottom floor of the Arts and Science building room 116. Access to this facility includes all students, faculty, and staff of Antioch College, but priority will be given to art majors currently enrolled in a visual arts class. The wood located in the shop can only be used by currently enrolled art students. Anyone wanting access to the facility will need to be trained on the proper use of the equipment by a faculty member or the studio coordinator, and they must sign a safety agreement. The hours of operation will be posted on the studio door and are subject to change each quarter.

This handbook has been prepared to help ensure safety in the Wood Shop at Antioch College. No document can replace actual instruction, and this book should be seen only as a supplement to thorough supervised training. It is the responsibility of the user to utilize their training, experience, and good judgment to work safely. Though many of the tool safety procedures apply broadly to tools of a given type, this has been written specifically for the Antioch Wood Shop and the tools contained there. This handbook is a living document and will be updated with changes and additions to the Wood Shop. The most current version can always be found in the shop. This document has been created by Arts Studio Coordinator Forest Bright. Questions and comments may be directed to fbright@antiochcollege.org.

Contents

WOOD SHOP
EMERGENCY PROCEDURE
CALL 911

1. GIVE THE EXACT LOCATION OF YOUR EMERGENCY:
One Morgan Place, Yellow Springs
Antioch Campus - Arts and Science Building
WOOD SHOP- ROOM 116 – IN THE BASEMENT

2. GIVE THE PHONE NUMBER FROM WHERE YOU ARE CALLING.

3. GIVE YOUR NAME.

4. DESCRIBE THE NATURE OF THE EMERGENCY (INJURY, FIRE, ETC).

5. STAY NEAR THE PHONE, IF POSSIBLE, TO RECEIVE ADDITIONAL INSTRUCTIONS.

THEN CALL (937) 251-4005
FOR CAMPUS SAFETY

Campus Safety should be notified of all injuries. They can provide assistance with First-Aid, injury assessment, and reporting.

Minor injuries not requiring attention from a medical professional can be treated using the First Aid kits mounted in the Wood Shop.

General Safety Rules

1. All persons must wear eye protection upon entering the wood shop. Safety glasses and face shields are provided in the studio.
2. Working with wood is dusty. You should wear a particle mask! If you have dust allergies or asthma please consider using a good particle mask.
3. Appropriate attire must be worn to work in the wood shop. No jewelry or baggy clothes may be worn when working with power tools. Long hair must be tied back. No open toed shoes. Never wear gloves when working with free standing machine equipment.
4. No student is allowed to work with power tools while alone in the shop.
5. No one is permitted to remove a safety guard from any tool.
6. No adjustments are to be made to any equipment except by the Shop Coordinator or the Shop Monitor. No exceptions.
7. Never speak to anyone using a power tool. Wait until they are done.

8. If you find any tool in need of repair, turn it off immediately and tell the Shop Monitor. Under no circumstances make repairs to the equipment yourself.
9. Shop users are responsible for immediately cleaning up their work area and the tools when done. This must be done before another person uses the area. Brooms, hand brooms, a Shop-Vac, and dustpans are provided. Failure to clean up can result in suspension from the shop.
10. Wood and supplies must not be stored in the shop. Projects in process may only be left with permission of the Shop Coordinator.
11. Only new lumber may be used in the shop. All bark must be removed from wood and wood must be properly dry. Any recycled or found materials must be inspected by Shop Coordinator before being machined.
12. Nothing wet is to be placed on any of the tools. No drinks, towels, food, etc.
13. No other material, like metal or plaster, is to be used in the wood shop without permission of the Shop Monitor.
15. No open flame in the wood shop.
16. Immediately report any and all accidents or incidents to the Shop Monitor, no matter how small.
17. If you notice that a specialty tool (Usually a small and portable one.) is missing from shop inventory talk to the Shop Coordinator or the Shop Monitor and arrangements may be made to order the tool.
18. If you are unsure of how to do something ask the studio coordinator.
19. Any damage to equipment due to negligence will be billed to the individual responsible.
20. Stress, anxiety, sleep deprivation, low blood sugar, drugs (prescription and recreational) will interfere with your ability to work safely. If you cannot be unconditionally focused on your work, you put yourself and those around you at risk.

Please notify the Shop Coordinator and/or the Shop Monitor if you have any disabilities that may require some modifications in the Shop so that appropriate arrangements may be made. The Art Studio Coordinator and the Arts Faculty make the final decision on how this shop and equipment will be used.

Students can receive an authorization training session from the Shop Coordinator, but a training must be scheduled in advance. Please email fbright@antiochcollege.org to schedule a time.

Equipment

Our wood shop is equipped with the following tools:

Panel Saw
Table Saw
Miter Saw
Band Saw

Scroll Saw
Jig Saw
Drill Press
Combination Sander
Belt Sander, Random Orbital Sander
Brad Nailer, Narrow Crown Stapler, Finishing Nailer
Hand Drills
Hand Tools

There is other equipment not listed, that can be used with the direct consent and training of the studio coordinator or visual arts faculty. Each tool listed above has it's own set of rules and needs proper training.

Applicable Safety Standards
OSHA website
• 29 CFR 1910.147 {Control of hazardous energy}
• 29 CFR 1910.212 {General requirements for all machines}
• 29 CFR 1910.213 {Wood working machinery requirements}
• 29 CFR 1910.219 {Mechanical power-transmission apparatus}
• 29 CFR 1926.304 {Wood working tools}
• 29 CFR 1910.132 {Personal Protective Equipment}

Potential Hazards

• Contact with the blade is the most common injury. Extreme caution is needed because the operator's hands
may come close to the saw blade, and a saw blade cannot be completely guarded.
• Getting loose clothes, jewelry, or long hair caught in moving parts.
• Being hit, especially in the eyes, by debris flying from point of operation.
• Contact with moving pulleys and belt.
• Inhalation of dust and particles.
• Dropping objects onto foot.
• Electrical shock

Panel Saw

1. Cut down full sheets of plywood on the panel saw. Do not use the table saw for full sheets!

2. When cross cutting(cutting against the grain of the wood) let the saw blade come to a full stop before raising it up for the next cut. When cross cutting cut from the top only.

3. Do not drop plywood on guide wheels, this might throw them out of alignment.

4. Support large sheets of plywood properly.

5. When ripping on the panel saw you will need help from the Shop Monitor to tail off the material. The Monitor will finish the cut by pulling both the stock and the off cut through the saw.

6. Clean tool and work area when done.

Table Saw

1. Only use this saw with the Art Studio Coordinator or Art Faculty present, unless otherwise specified.

2. Turn on the dust extractor before turning on the table saw.

3. The saw is equipped with a blade guard. The device is the most important safety feature for this piece and may not be removed or circumvented. If there is a cut to be made on the table saw that must circumvent the guard the MONITOR must perform the cut.

4. Be certain that the blade is sharp and that it is the right blade for your work.

5. Set the blade so that it extends no more that 1/4-inch above the stock to be cut.

6. Stand to one side of the operation blade. Do not reach across it.

7. Make sure that the stock is fully past the blade before turning the saw off.

8. MAINTAIN A SIX-INCH MARGIN OF SAFETY FROM THE BLADE. A variety of push sticks are provided and must be used when cutting closer than six inches.

9. Rough stock must be surfaced before cutting on the table saw.

10. NEVER CUT STOCK FREE HAND.

11. Use only new stock that is free of knots, splits and warp.

12. Do not let small scrap cuttings accumulate around the saw blade. Use a push stick to push them away.

13. Students helping to "tail off" stock from the saw should not push or pull the stock. They should support it as necessary. The operator must control the feed and direction of the cut.

14. Cross cutting on the table saw is dangerous. Cross cuts 12" or under can be made on the compound miter saw.

15. Cut down full sheets of plywood on the panel saw.

16. As you complete your work, turn off the saw and remain until the blade has stopped.

17. Clear the saw of dust and waste. Return the saw blade to zero settings. SWEEP THE WORK AREA!

Miter Saw

1. MAINTAIN A SIX-INCH MARGIN OF SAFETY FROM THE BLADE. This means that you must keep your hands six inches away from the path of the saw blade.

2. Wear safety glasses.

3. Keep the blade guard in position at all times.

4. Hold stock firmly on the table and against the fence.

5. After making the cut but before raising the saw make sure that the blade has come to a complete stop.

6. When making multiple cuts of various angles do not move hands under the blade whether it is moving or not.

7. When you complete your work at the saw lower the saw and lock it in place. Sweep the workstation and the floor. All scrap goes in the scrap bin.

Band Saw

1. Wheel guard doors must be closed and the blade properly adjusted before turning on the machine.

2. Adjust the upper guide assembly so it is no more than1/4" above the work.

3. Allow the saw to reach full speed before starting to feed the work.

4. The stock must be held flat on the table.

5. Feed the saw only as fast as the teeth will remove the wood easily.

6. MAINTAIN AT LEAST A FOUR-INCH MARGIN OF SAFETY. (This means that the hands should always be at least four inches away from the blade when the saw is running.)

7. Plan cuts to avoid backing out of curves, whenever possible. Stop the machine before backing out of a long curved cut.

8. Make turns carefully and do not cut radii so small that the blade is twisted then broken.

9. Round stock should not be cut unless mounted firmly in a jig.

10. Do not let small pieces of wood accumulate around the blade. Move them out of the way with a push stick or turn off the saw, wait till the blade stops, and then clear the table.

11. If you hear a clicking noise, turn off the machine at once. This sound indicates a crack in the blade. If the blade breaks, shut off the power and move away from the machine until both wheels stop.

12. Turn off the machine as soon as you finish working. Sweep the table and the floor. All scrap in the scrap bin. Lower the upper guide assembly.

Scroll Saw

1. Approach your work with a safe attitude!

2. Inspect your stock carefully.

3. Support a large workpiece to reduce blade breaking and pinching.

4. Always use the hold down device by lowering and adjusting the hold down foot so that it presses lightly on the workpiece, for each new operation.

5. Always keep your hands and fingers away from the blade; follow the 3" rule.

6. Never place your hands or fingers directly in line with the blade where you could cut them if you slipped.

7. Do not start the machine with the blade in contact to the workpiece.

8. Hold the work firmly against the table.

9. This is a variable speed scroll saw; use the proper speed for the job & type of stock you are cutting.

10. Make relief cuts before cutting long or sharp curves.

11. STOP the saw and wait until all motion has stopped before removing small scrap & cut off pieces away from blade and off the table.

12. Do not cut a workpiece that does not have a flat bottom that can rest on the table.

13. Do not cut a workpiece that is too small to safely be supported and held onto.

14. Never back out a bound blade from the kerf with the machine on; turn it off, then back out.

15. Use a "V" block to cut cylindrical stock.

16. When finished, release the blade tension to reduce stress on the blade.

17. Clean the work area.

Jig Saw

1. Wear proper personal protection equipment. Safety glasses are required. Wear hearing protection that is appropriate for the level and duration of the noise in the tool room.

2. Wear proper apparel. No loose fitting clothes or neckties. No loose jewelry. Long hair must be covered and tied back. Non-slip footwear is recommended.

3. Keep the work area clean. Cluttered areas and benches invite accidents.

4. Be sure you are using the proper blade for the material and type of cut to be performed.

5. Clamp material down to a table when possible.

6. Plan your cut before you begin. Be sure that all cords are clear of your cutting path.

7. Start the saw just before you come in contact with the material.

8. If you must stop in the middle of a cut, release the trigger while firmly holding the saw down against the material. Allow the blade to come to a complete stop before pulling the saw away from material.

9. When finished, unplug the jig saw and remove the blade. Store the saw and blades in their proper location.

Drill Press

1. Wear safety glasses.

2. Secure work properly.

3. Never stand on tool.

4. Do not wear gloves or loose clothing.

5. Never start the drill press with the drill bit or cutting tool in contact with the work piece.

6. Do not attempt to drill material that does not have a flat surface. No round stock.

7. Stop the drill press before removing scrap pieces from the worktable.

8. Clean the tool and the work area when done.

Combination Sander

1. When using the Sander, turn on the dust extractor.

2. Wear safety glasses. Dust mask (supplied by you) recommended.

3. Do not use worn out or loaded up sanding tubes or belts. There is a rubber sanding belt cleaner next to the sander to use on loaded up sanding surfaces. Use of the cleaner will make the sanding surfaces last longer.

4. Always hold work securely.

5. Move your work across the surface of the abrasive. DO NOT sand in one place, this clogs, burns and ruins the abrasive surface.

6. The sanding belt should track in the middle of the plate. Do not use the machine if the belt is rolling off one side of the other . Report any tears or holes or flaws to the Monitor. Do not attempt to readjust the machine yourself.

7. Clean up when done.

Brad Nailer, Narrow Crown Stapler, Finishing Nailer

1. You must wear safety glasses when using any of these tools.

2. Connect tool to air supply before loading fasteners. Always assume that the tool contains fasteners.

3. Never point the tool at yourself or anyone else.

6. Remove finger from trigger when not driving fasteners. Never carry a tool with your finger on the trigger.

7. Do not drive fasteners into a surface that is too hard.

8. Do not drive fasteners on top of other fasteners or drive fasteners at too steep of an angle.

9. Keep hands and fingers away from the nailing area. You could nail through the material and into your finger.

10. Do not fasten too close to the edge of the material. The material could split and the fastener could fly free or ricochet, causing personal injury to you or someone in the work area.

11. When done blow out tool and return to the tool case. Roll up air hose.

Hand Drills

1. Wear proper personal protection equipment. Safety glasses or face shield are required. Wear hearing protection that is appropriate for the level and duration of the noise in the tool room. A dust mask is recommended. Do not wear gloves.

2. Wear proper apparel. No loose fitting cloths or neckties. No loose jewelry. Long hair must be covered or tied back. Non-slip footwear is recommended.

3. Keep the work area clean. Cluttered areas and benches invite accidents.

4. Most drills have a locking pin that holds the trigger “on” until disengaged. Make sure that the trigger is in the “off” position before plugging in the drill to the power supply.

5. Disconnect power supply before changing or adjusting bit or attachments.

6. Select the bit or attachment suitable for the size of the drill and the work being done. The most common sizes are those that take shanks up to 3/8” or 1/2” diameters.

7. Ensure that the bit or attachment is properly seated and tightened in the chuck. Remove chuck key before starting drill.

8. Use only bits and attachments that turn true. Do not use a bent drill bit.

9. Use the auxiliary handle for larger work or for continuous operation.

10. Keep all cords clear of cutting area. Inspect cords for frays or damage before use.

11. Secure work piece being drilled to prevent movement. Do not drill with one hand while simply holding the material with the other.

12. Withdraw the bit from the stock frequently to clear the shavings and cool the bit.

13. Do not use excessive force to drill into hard material. Reduce drill speed.

14. Do not overreach. Always keep proper footing and balance.

Hand Tools

1. Safety glasses required.

2. When using the carving chisels DO NOT FORCE THEM, do not hog out too much wood, approach knots with caution. Take care of the mallet when striking the chisels. DO NOT DROP THE CHISELS.

3. Secure stock when working. If you don't know how, ASK!

4. Put them back in their proper place.

5. When cutting with a knife or razor, cut away from yourself.

6. If the tool is broken or compromised please tell the Shop Monitor.

7. Do not drill yourself, stab yourself, or hit yourself. If you get something in your eye wash it out

Introduction to Woodworking Authorization & Handbook Review Acknowledgment Form

I have attended the Introduction to Woodworking Authorization training session, and I have read and understand the Woodworking Authorization Handbook. I have had the opportunity to ask questions concerning the training and the Handbook, and all of my questions have been answered to my satisfaction. I understand that I remain responsible for knowing and adhering to the School's Wood Shop safety regulations and procedures. I understand that my safety and the safety of others using the Wood Shop is dependent upon adhering to these safety protocols/procedures. I understand and acknowledge that if I fail to abide by the safety protocol/procedures outlined in this Handbook and presented in the Introduction to Woodworking Authorization Workshop, I may be subject to disciplinary sanctions, including, but not limited to, fines and/or the loss of Wood Shop privileges. Furthermore, I acknowledge that the School will not be responsible to me for any damage or injury caused by my negligence or willful misconduct. I understand that I am financially responsible for replacing lost or damaged equipment.

I further acknowledge that loss of privileges to use the Wood Shop does not in any way excuse me from completing my course work on time.

I understand and acknowledge that it is my responsibility to test the equipment that I use and/or receive and that I must seek the pertinent instruction on proper use of a piece of equipment from Wood Shop Staff or other authorized person before I attempt to use the equipment. If I encounter safety problems in the course of my work, I will discuss them with shop staff. I acknowledge that it is my responsibility to report any equipment malfunction or damage immediately to Shop staff.

Accepted and Agreed:

Name (please print): _____

Signature: _____

Date: _____

Student Major:_____

Student ID: _____