# Eastern Kentucky University | Department of Art and Design General Purpose Workroom and Wood Shop Safety Procedures & General Rules

The General Purpose Workroom and Wood Shop (GPWR) is a facility offered by the Department of Art and Design are to be used by current department faculty, staff and enrolled students. It is considered a privilege to use the shop and is expected that it will be used in accordance with all safety rules and restrictions as determined by the Department of Art and Design and Eastern Kentucky University. The General Purpose workroom and wood shop are communal work areas. They are designed as day use spaces and are meant to remain accessible to all Faculty, Staff and Students (currently enrolled in the Department of Art and Design). These spaces are not to be used as personal studios for Faculty, Staff or Students or permanent classroom extensions.

Any willful misuse of the shop or deviation from the safety rules and usage policy will result in **SUSPENSION** of the faculty, staff and student's shop privileges. This suspension will last for two weeks the first offence, and on academic semester for the second offence, and a permanent suspension for a third offence.

- **Shop Coordinator** (*Person assigned to manage and supervise GPWR*)
- **Shop Monitor** (Student Worker or Faculty monitoring his/her class)
- **Department Safety Committee** (Responsible for reviewing procedure and incident reports or problems with GPWR)
- All accidents and reports must be brought to **Department Chair** immediately. If a student is hurt, report it to the office immediately. Do not wait till the next day.

#### **GPWR Orientation and Safety Requirements:**

- 1. Successful completion of the safety policy precludes GPWR use.
- 2. Demonstration of proficiency of select pieces of GPWR equipment precludes lab use.
- 3. Eastern Kentucky University General Purpose Workroom and Wood Shop **RELEASE FORM** must be completed and filed in the Department Office Campbell 309 prior to any Faculty, Staff or Student having access to the work space.
- 4. GPWR Orientation and Safety Requirements are to be renewed every semester.

### **Injury-Causing Accidents:**

In the event of an injury-causing accident, the following procedures must be followed:

- 1. Notify the Shop Coordinator **immediately!** Shop personnel will follow established procedures.
- 2. All personal injury accidents require a meeting between the injured person and the Shop Coordinator before shop privileges will resume. The purpose is to determine the cause of the accident for the prevention of future accidents.

#### **Non-injury Accidents:**

In the event of accidents resulting in machine damage, material "kick-backs," jamming, or other unsafe events, the following procedure must be followed:

1. A meeting is required between the person involved in the accident and the Shop Coordinator before use of GPWR can resume.

#### **Shop Occupancy Requirements:**

- 1. In order to maintain a safe shop environment strict user limits are enforced.
- 2. No more than 20 people/ students can be in the General Purpose Workroom and Wood Shop at any given time. If the space is being used for instructional purposes, it is the responsibility of the course instructor to make sure that the required number is not exceeded. The Shop monitor is also responsible to make sure that the number of occupants does not exceed 20 people during monitored workshop hours.
- 3. You must sign in and sign out every time you use the shop. This includes Faculty, Staff and Students during classroom, monitored and non-monitored hours.
- 4. Sign in log is located on center table.

## **General Safety**

- 1. All persons must wear safety glasses upon entering the wood shop. Please note that a face shield is not a substitute for safety glasses; it is only added protection.
- 2. Working with wood is dusty. You must provide your own 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 General Purpose workroom and wood shop.
  - Closed toe shoes and full-length pants are required.
  - Eye protection must be worn at all times when using power tools. (Failure to wear eye protection may result in loss of shop privileges)
  - No jewelry or baggy clothes may be worn when working with power tools.
  - Long hair must be tied back.
  - Never wear gloves.
- 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. Dust collection system must be turned on when working with equipment. If the dust collection system for a specific piece of equipment is not working, you are not permitted to use the equipment and must report the broken system to the Shop Coordinator or Shop Monitor for repair.
- 8. Never speak to anyone using a power tool. Wait until they are done.
- 9. If you find any tool in need of repair, turn it off immediately and tell the Shop Monitor. Under no circumstances do you make repairs to the equipment yourself. Please note that broken tools will take up to at least two weeks to be repaired.
- 10. Shop users (Faculty, Staff or Student) are responsible for immediately cleaning up their work area and the tools when done. Each machine and work area should be cleaned immediately after use. The last person to use a machine is responsible for cleaning the machine and surrounding work area before another person uses the area. Brooms, hand brooms, Shop-Vac, dustpans, and an air hose are provided. Failure to clean up will result in suspension from the shop.
- 11. Wood and supplies must not be stored in the shop. Projects in process may only be left with permission of the Shop Coordinator or Department Chair for not more 48 hours. Must be clearly marked with an expected date of completion. Failure to do so may result in the material being recycled or disposed of.

- 12. 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.
- 13. Nothing wet is to be placed on any of the tools. No Pop Cans, towels, food, etc.
- 14. No other material, like metal or plaster, is to be used in the wood shop without permission of the Shop Monitor.
- 15. Students may only use the Lathe, Planer, Jointer, Shaping Table and CNC Router when Shop Coordinator is present. Students May only get instruction on these pieces of equipment from the Shop Coordinator.
- 16. Absolutely **NO** open flame in the wood shop.
- 17. Immediately report any and all accidents or incidents to the Shop Monitor, no matter how small.
- 18. 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. Replacement will take at least two weeks. If you are unsure of how to do something ask the Shop Monitor. Any damage done to equipment due to negligence will be billed to the user of the equipment.
- 19. Please notify the Shop Coordinator and/or Shop Monitor if you have any disabilities that may require some modifications in the Shop so that appropriate arrangements may be made.

The Wood Shop Coordinator, Chair of Department Safety Committee, Chair of the Department of Art and Design shall make the final decision on how this shop and equipment will be used.

#### **Wood Shop Safety - TOOLS & MACHINERY**

#### **MITER SAWS**

- 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 and before raising the saw make sure that the blade has come to a complete stop.
- 6. When making multiple cuts at various angles do not move hands under the blade whether it is moving or not.
- 7. When you complete your work with the saw, lower the saw and lock it in place. Sweep the workstation and the floor. All scrap goes in the scrap bin.

# **TABLE SAW**

- 1. Safety glasses are required for this tool. Face shield is optional but recommended.
- 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. The shop has a dedicated blade for cutting Plexiglas.
- 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 and at least one side jointed before being cut 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 Kobalt sliding 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!

#### **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.

#### **BELT AND SPINDLE 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, these 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 re-adjust the machine yourself.
- 7. Clean up when done.

# **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 stock 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.
- 6. The Monitor will finish the cut by pulling both the stock and cut through the saw.
- 7. Clean tool and work area when done.

# **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 than 1/4" 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 SAFTEY.** (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.

#### BRAD NAILER AND THE NARROW CROWN STAPLER

- 1. You must wear safety glasses when using the Brad Nailer and the Narrow Crown Stapler.
- 2. Add a drop of tool oil into air supply connector before connecting air supply hose.
- 3. Disconnect tool from air hose before clearing a jammed fastener.
- 4. Connect tool to air supply before loading fasteners. Always assume that the tool contains fasteners.
- 5. 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 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.
- 3. DO NOT DROP THE CHISELS.
- 4. Secure stock when working. If you don't know how, ASK!
- 5. Put them back in their proper place.
- 6. When cutting with a knife or razor, cut away from yourself.
- 7. If the tool is broken or compromised please tell the Shop Monitor.
- 8. Do not drill yourself, stab yourself, or hit yourself. If you get something in your eye wash it out

#### THE FOLLOWING TOOLS BELOW ARE NOT INCLUDED IN THE SAFETY ORIENTATION.

In order to use these tools, you must get a demonstration of how to use them properly. It is important to discuss your construction plans with the Shop Coordinator and Shop Monitor and consider how you will use the tools and the shop to complete your project.

#### 4" ANGLE GRINDER

- 1. Wear a face shield and safety glasses. A face shield is not a substitute for safety glasses.
- 2. When using the tool for sanding move the tool around the stock, do not leave it in one place.

- 3. Do NOT grind metal in the wood shop.
- 4. Never remove the guard. It can be rotated for optimum positioning.
- 5. Always use the auxiliary handle for maximum control over torque reaction and kickback
- 6. Secure the work properly on the workbench. Adjust your work to a comfortable height. There is a portable step to stand on if you need to be higher. IF YOU DON'T KNOW HOW TO SECURE YOUR WORK—ASK!
- 7. When carving with the carving attachment for the angle grinder, be very careful!
- 8. Grip the tool with both hands at all times.
- 9. No loose clothing.
- 10. Be very aware of people around you, ask them to give you space if you need it.
- 11. Blow off the tool, put it away and sweep the work area.

#### **DIE GRINDER**

- 1. Keep away from rotating spindle and accessory.
- 2. Do not wear jewelry or loose clothing. Keep hair away from tool.
- 3. Use accessories that are rated for the Die Grinder only.
- 4. Keep hands clear of spindle and tool end.
- 5. Use both hands to hold tool
- 6. Be aware of excess hose on the floor, tripping is a hazard.
- 7. Clean tool and work area when done.

#### **JOINTER**

- 1. Be sure that you have the Shop Coordinator's approval to operate this machine. If you are familiar with jointer operation but have never used the jointer in the woodshop you still need a demonstration from the Shop Coordinator.
- 2. Safety glasses and face shield required when using this machine.
- 3. Before turning on the machine, adjust for depth of cut and position of fence.
- 4. Do not remove the guard. Do not adjust the out feed table without Shop Coordinator's permission.
- 5. Maximum cut depth for jointing an edge is 1/16th".
- 6. Stock must be at least 12 inches long.
- 7. Feed the work so that the knives will cut "with the grain". Use only new stock that is free of knots, splits and checks.
- 8. Keep your hands away from the cutter head, even though the guard is in position. **MAINTAIN AT LEAST A SIX-INCH MARGIN OF SAFETY**. (This means that the hands should always be at least six inches from the cutter head.)
- 9. Use a push block when planing a flat surface. Never apply pressure directly over the knives with your hand.
- 10. Do not plane end grain.
- 11. The jointer knives must be sharp. Dull knives will vibrate the stock and may cause a kickback.
- 12. Material cannot be less than 1/4 inch thick.
- 13. Clean tool and work area when done.

#### THICKNESS PLANER

- 1. You must have permission of the Shop Coordinator to use the Thickness planer.
- 2. New wood only in the planer.
- 3. The Shop Coordinator must inspect all wood before using the Thickness Planer. Under no circumstances can recycled material be used.
- 4. Do not plane the maximum amount off of stock when planing. Two passes through the planer can be better than one. Be aware that some woods are harder than the others are; hard woods will need more passes through the planer.

- 5. Keep hands and fingers away from cutter head when machine is running.
- 6. When planning thin pieces of wood, be sure to stand to one side in case the wood breaks and kicks back.
- 7. Plane near the door or outside to make the cleanup easier.
- 8. Check planer table before turning it on, a tool might have slipped under the cutter head.
- 9. Make all adjustments with the power off.
- 10. Support the work properly at the in feed and at the out feed.
- 11. Do not perform planing operations on material shorter that 10", narrower than 3/4" wider than 121/2", or thinner than 3/16"
- 12. Clean tool and work area when done

#### **CIRCULAR SAW**

- 1. Wear safety glasses.
- 2. Cutdown full sheets of plywood on the panel saw.
- 3. Check to see that blade guard is working properly.
- 4. Set blade depth! to 4" below material you are cutting.
- 5. Arrange the material so that the saw will not bind as you are cutting the material.
- 6. Unplug cord before changing the blade or working on the tool.
- 7. Clean tool and work area when done.

#### APPENDIX F

- Voluntary Use Respirator Maintenance Procedures
- Cleaning and Sanitizing
- Disposable Dust Mask:
- Do not attempt to clean respirator, discard when necessary and replace with a new respirator
- Elastomeric Reusable Face Piece Respirators:
- Respirator users must clean their respirator after each use with respirator wipes paying particular attention to the face sealing surfaces. If a more thorough cleaning becomes necessary, use the following procedure:
- 1. Remove cartridges/filters, do not wash or disinfect used cartridges.
- 2. 2Disassemble respirator, including valves, face-piece yoke, and cartridge holders.
- 3. Clean respirator parts:
  - a. Immerse them in warm soap and water solution.
  - b. Gently scrub face-piece and parts with a cloth or soft brush.
  - c. Remove foreign matter from surfaces of exhalation valve and seats.
- 4. Sanitize parts by immersing for two minutes in a water solution containing:
  - a. commercial cleaner/sanitizer, or
  - b. two tablespoons of bleach per gallon of water, or one teaspoon of tincture of iodine per gallon of water.
- 5. Thoroughly rinse parts with warm water.
- 6. Allow parts to air-dry in a clean location.
- 7. Reassemble respirator by reversing steps used to disassemble. Install new cartridges if needed.

#### **Respirator Storage**

- 1. Store respirator in clean sealed container or plastic bag while not in use.
- 2. Stored in a clean dry place. Do not distort rubber face-piece during storage

# Eastern Kentucky University | Department of Art & Design General Purpose Workroom and Wood Shop

RELEASE FORM	
I, (print name)	acknowledge that, I have
read the proceeding woodshop rules for use of sa	• •
safe operation of the tools and machinery includi	
the General Purpose Workroom and Woodshop s Woodshop tools is a dangerous activity, and in co	
Design at Eastern Kentucky University granting	
Purpose Workroom and Woodshop studio, recog	
activities, and hereby assume all risk of personal	
Purpose Workroom and Woodshop studio activit	
representatives, and assigns do hereby release the	
Kentucky University, its officers, agents, and em	ployees from all liability, including claims and
suits at law or in equity, for and injury, fatal or o	
from my deviation from the General Purpose Wo	orkroom and Woodshop studio
rules for use and safety.	
Signature	
Date	
Date	
STATEMENT OF RESPONSIBILITY –	
PERSONAL/PUBLIC PROPERTY	
I, (print name)	recognize that the instructors/staff
will exercise great care and attention while handl	
assigned a shared locker space to store my tools/o	
to secure this space. All personal possessions mu	
each grading period. There will be no long term s	storage of work beyond the end of the grading
period. All items will be considered abandoned/d	
semester. Any arrangements by any department r	
appropriate, acceptable, accompanying insurance	
of Art and Design and Eastern Kentucky University Language that there are	
tools/materials/work, I recognize that there are comaterials/work. I understand that I am ultimately	· · · · · · · · · · · · · · · · · · ·
am accepting the risk of loss by leaving my work	1
personal representatives, and assigns do hereby r	
Eastern Kentucky University, its officers, agents,	
claims and suits at law or in equity. Please take re	
Signature	

#### APPENDIX D

- Voluntary Use Respirator Training / Documentation Sheet
- Information for Employees Using Respirators Not Required Under the Standard (Appendix D to 29 CFR 1910.134)
- Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If your employer provides respirators for your voluntary use, or if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.

# You should do the following:

DDDTTXIAXC

- Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.
- Choose respirators certified for use to protect against the contaminant of concern. NIOSH (The National Institute for Occupational Safety and Health of the U. S. Department of Health and Human Services), certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.
- Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke.
- Keep track of your respirator so that you do not mistakenly use someone else's respirator.
- By signing this record, I indicate I have read and been provided a copy of Appendix D of the OSHA regulation 20 CFR 1910.134. I understand that any voluntary use respirator provided to me by the department, or that I bring into the workplace, cannot be used where respirator use is required because of hazardous air contaminant concentrations.

PRINT NAME			
SIGN NAME			
DATE	_		

# General Purpose Workroom and Woodshop Equipment Training Identification Form.

(Form must be returned signed to 309 Campbell Building in order to revive an Art Card. This card must be presented to the Shop Monitor prior to using any equipment.)

has been trained for use with the

following group	os of power equipr	nent.		
1	2	3	4	]
Chop Saw Band Saw Panel Saw	Drill Press Sander Grinder Wheel Buffer	Table Saw Radial Arm Saw Drill Press	Jointer Planer	
Signature of Sh	op Coordinator or			
Date				
Student Signatu	ire			
Student No.	-	_		

TRAINING IS REEVALUATED EVERY SEMESTER