WORKSHOP: "PYROGRAPHY"

Summary: Participants created designs on wood, cork and bamboo surfaces with a pyrography (burning) tool. They experimented with a variety burning tips to create marks, lines and shading. They embellished their designs with acrylic paint washes.

Materials and Equipment:

scrap wood board for experimenting
cork trivet
a wood object
scissors
cardboard to protect your work surface
ruler
acrylic paint assorted colours (thin wash colours)
t-shirt fabric scraps
plastic container for water
pliers
extension cord
sandpaper
smock
hockey tape
instructions/ideas sheet
pencil, eraser, sharpener
sketch paper
carbon paper
pyrography (burning) tool
protective gloves
safety glasses
masking tape
paint brushes assorted sizes
plastic lids or foil for palettes
scrap denim fabric
pattern - flower
table cover
fan (not provided)
optional: 2x4 off cuts
sample artwork

Class Plan:

1. Pyrography is the art or technique of burning designs onto any receptive surface, including wood. Wood burning is the art of writing or burning designs on wood.
2. Safety:
    a. Work in a well-ventilated area with a fan to blow the smoke from burning outside. Ensure that you are allowed to use a tool for burning at your location (e.g. apartment building).
    b. Burning on any surface creates smoke so ventilation is necessary for safety and to avoid setting off your fire alarm.
    c. Wearing protective gloves when working with your tool is recommended.
    d. Do not leave your burning tool unattended and always switch it off and unplug it after use.
    e. Cover your work surface to protect it. A wood board is idea for this.

f. Keep the cord of your tool away from your hot burning tip.

g. Place the burning tool on the stand when you put it down, and avoid touching the stand.

h. Keep your burning tool away from water.

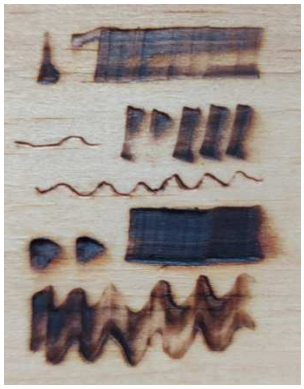
3. Choosing a surface to work on:
   a. Untreated wood with low grain works well. The low grain avoids the burning tool catching on raised grain. Untreated wood is best because treated or painted wood will emit toxic fumes when burned.
   b. Avoid composite woods like MDF because they contain a large amount of glue holding the wood pulp together and will emit toxic fumes when burned.
   c. Cork works well. It burns quickly and the tool can catch on the uneven surface but this is manageable.
   d. Leather can be used for pyrography. Choose a leather that has been dyed with plant based dyes. Avoid leathers that have been coloured with chemical based dyes, because they will emit toxic fumes when burned.
   e. Bamboo works but is a challenge. Carbon deposits form quickly on the burning tool tip, making it difficult for heat to transfer from the tool to the surface. Frequently cleaning is needed.

4. Your pyrography tool comes with a variety of tips. There are many more types of tools and tips available if you get very interested in this technique. All the tips provided are solid tips, from left to right the shapes are: universal, curved, straight tip/stencil cutter, shading, flow, and cone points.

5. The tips unscrew from the end of the burning tool. Unplug your burning tool and allow it to cool before changing the point. Solid point tips are generally made of brass, which is a soft metal. Changing tips when it is hot can strip the screw thread. Many places recommend using pliers to screw points into the end of the burner pen. This can mark the brass tips so I prefer to change tips by hand when the tool is fully cool.

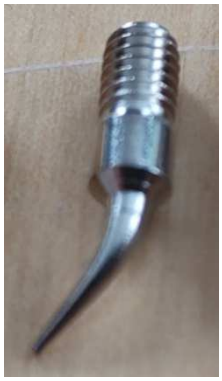
6. Plug in burner and switch on to heat. The switch is an on/off on the cord. Wait 10 minutes for it to heat.
7. Hold the burner like you would a pencil. Holding it too tightly will make your fingers hot. Do not touch the point or metal parts of the burner when it is hot. Wearing protective gloves is recommended.

8. Wood burning:
    a. Experiment first on a scrap piece of wood and or scraps of material you plan to work.
    b. The tip points react differently to different types of wood and materials like leather.
    c. Go slowly to achieve darker lines.
    d. Move your wood piece as you work to create smoother lines.
9. Each tip produces a different type of mark.
    a. The universal point is used to create a variety of straight or curved line thicknesses. Marks on the left are made on wood and marks on the right are made on cork.

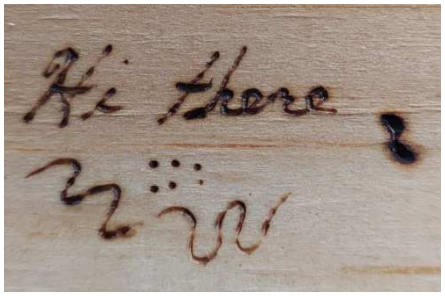




    b. The curved tip is used to burn smooth wavy lines, to cut curves on stencils and for small, intricate

designs.



c. The straight tip is used to create fine detailed lines, to cut stencils and for broad or straight cuts.

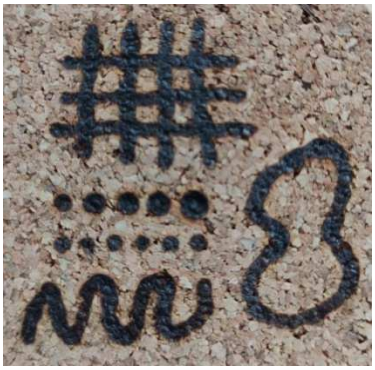




d. The shading point is ideal for light and dark shading and to create a tear drop pattern.



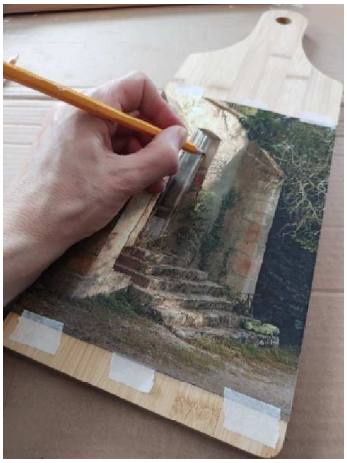
e. The flow point is used for line work, points and dots.





f. The cone point is used to create thinner, more detailed lines and for dot work.


10. Options for your design:
    a. Work free hand without lines to follow and draw with your burning tool.
    b. Plan your design by sketching or transferring a pattern or image straight onto your design surface with carbon paper.



    c. Draw your design on a separate piece of paper and transfer it to your surface with carbon.
11. Project Example: Flowers on Cork
    a. Sketch or trace (with carbon paper) a design onto your cork surface. Go over it afterward with pencil to darken the lines enough to see them while burning.



    b. Outline your drawing using the cone tip to create strong definition.

c. Add less defined lines around the centre and to highlight texture on the flower petals.

d. Add shading to the flower centre and petal inner and outer edges with the shading point.

e. Add burn dots to the centre of your flower using the cone tip and poking without moving the tool.

f. Create a wash of transparent acrylic paint using greens and yellows mixed with a lot of water. Do not prime your surface first. Apply your paints very thin so they don't cover your burn lines. Apply the green paint wash at the joins of each set of petals, using outward wide strokes to create leaves.

g. Create a wash of acrylic paint and water using orange, red and yellow. Apply the wash to your flower petals and centre, using more red in the centre and more yellow for the centre of the petals.

12. Project Example: Butterfly Wood Shape
    a. Sketch lines onto your shape. They can be anywhere in sections of patterns, or placed to work with the shape. Here I accentuated the shape, making wings, a body section, circles and dark edges.

b. Remove the yarn hanger from your wood shape and reattach it afterward or avoid touching it with your wood burning tool so it doesn't burn.

c. Start burning the lines of the pattern. I used a rounded flow tip, which is easy to guide in all directions and minimizes catching on the wood grain.

d. Add the body section lines to give a starting point for adding the other lines. You can go over your lines a second time if they aren't as dark as you'd like. The burning tool loses heat as you work with it, so pausing occasionally between lines with the tool in the air helps it to return to full heat.

e. Add lines to define the wings and different colour sections on your creature shape.

f. Applying less and less pressure as you draw makes a line that tapers off.

g. Use the shading tool to add shading to sections near the join of the wings and around the edges. This can be done on any creature shape, where a shadow would be cast by overlapping sections and to create the appearance of depth.

h. Accidental lines can be disguised by mirroring them on the opposite side. It adds to the design and looks intentional. The extra small lines on the bottom edge of the top wings were made with the burning tool handle by accident when adding shading. Adding them to both sides makes them look intentional.

i. Optional: Add a wash of colour with translucent or watered down acrylic paints. Here I used blue, white, gray and a lot of water. This is a great use for Inexpensive paints because the burn lines still

show through well.

j. This butterfly/moth isn't based on an actual one but can look fairly realistic. You could work patterns in sections instead of this approach or make a creature in all wild colours.

13. Cleaning the burning tips:
    a. If you notice black debris on your design surface or on the tip of your burning tool, it is time to clean your burning tip.

    b. Wipe it while hot on a scrap piece of denim fabric placed over a scrap piece of wood to avoid damaging your work surface.

14. Paint any part of your burned design or decide to leave it plain.
    a. Apply a wash of water and paint to add colour to sections of your design. Using more water to paint makes the colour a thinner wash.
    b. Primer isn't needed for this step. The natural surface showing through is so nice.
    c. Surfaces coated with acrylic paint are not food safe, so skip this step if you are using your surface for hot items or for food.
15. Happy creating, and please share pictures of your creations if you feel comfortable.

Useful Information/Adaptions/Variations:

- Wood burning is making marks on a wood surface. Pyrography uses the same tool but includes burning on a variety of surfaces.
- To sharpen or clean your tips, use a fine emery board.
- If you see black specs on your work, clean your tip by wiping it on a scrap piece of denim fabric when hot. Place the fabric on a scrap piece of wood first to avoid damaging your work surface. This removes carbon from the tip that is generated while burning.
- Try writing a poem or find a favourite inspirational saying and burn it in writing on your design surface.
- There are many types and shapes of burning tips available. The ones provided here are solid tips. Other types include wire tips and wire that you can shape and attach to your tool yourself.

Trouble Shooting:

- Avoid wood burning on very thin wood surfaces to prevent holes or experiment with it knowing it first.
- If you still get black debris on your design surface after cleaning your tip, you can polish your tip. When it is cold, rub your tip on a leather strop. A leather strop is a piece of vegetable dyed leather, rough side up attached to a scrap piece of wood with honing compound on it like aluminum oxide. Clean the honing compound off with your denim after polishing, and before heating your burning tool.

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