



BASIC GUIDELINES FOR THE CERAMIC STUDIO

From The Blue Studio at The Art School at Old Church

Ceramic Studio Handbook

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A NON-PROFIT ART SCHOOL & GALLERY

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Clay

- Recycled clay is free to use, when available. Clay bodies 182, 306, and Porcelain 257 are the only clays recycled in the studio. All other clays are to be thrown away or brought home to be recycled by you.
- New bags of studio clay-306, white stoneware-182, and porcelain are available for purchase at the front desk. The studio and white stoneware clays are \$15.00/bag, porcelain is \$22.00/bag. Once clay is paid for at the front desk, you will receive a receipt and PAID sticker. The receipt is to be given to your instructor or studio monitor and they will then retrieve the clay for you. Place PAID sticker given to you with your receipt onto your new clay along with your initials or name. Clay can be stored in the assigned bins in the back of the studio or on the bottom of your class shelving. Students should not be going in the back, unless specifically asked to do so by a teacher. (For liability reasons alone, this needs to be followed.)
- **If clay can be wedged, it should not go in the slurry bin. Wedge it, bag it, spray it lightly if needed, and place with the recycled clay.**
- **Slurry should be the only thing going into the bin for recycling.**
- **When finished at the wheel, drain water from the splash pan and bucket into the sink and scoop any slurry out to transfer to the recycling bin.**

- Any trimmings and leather hard clay go in the small can that is clearly labeled in front of the pugging machine. If the can is full, please do not continue to add to the bucket. The lid needs to be able to close on the bucket. At that point, students are to throw the clay away or bring home to recycle on their own.
- We do not recycle any bone-dry clay. Throw it away.
- No outside clays are allowed in the studio.

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Clean-Up

The Blue Studio is a communal studio and we need to be able to offer all students a clean work environment. Please be respectful of the classroom space and make every effort to clean up.

- Leave the studio cleaner than you found it. Classes and studio time participants are responsible for leaving the studio clean at the end of their session.
- Start cleanup 15 minutes before class or studio time ends. Do not wait until the end of class to clean up. Teachers need to be able to set up for the class that is starting after yours.
- Students are expected to clean up all of the areas they have worked in or around and put away all items used after cleaning. (i.e. mats, ware boards, banding wheels, molds, etc.)
- Rinse out sponges when done using them and do not cut the sponges.
- Potter's wheels should be cleaned, shut off, splash pans washed and returned.
- Clean any trimmings on the floor around the wheels and tables.
- Do not store work on bats. Use ware boards.
- Clean up spills as they happen.
- Once studio has been assessed that everything has been cleaned, please clean the sinks. We have a very old plumbing system. Do not throw clay down the drains!

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Firings & Procedures

Please know that we make every effort to take the utmost care of your pots once they enter the firing cycle. Please take the time to understand our system so that you can avoid any future frustration. If you have any questions, do not hesitate to ask your teacher.

- TASOC is not a production studio, limit your output and be conscious of the size of your work.
- Only TASOC clay and glazes may be used.
- Place glazed work on appropriate shelves.
- Do not glaze the bottom of work.
- When in doubt, check the “Reject Shelf” located in the kiln room.
- Do not let work pile up on any of the shelves (bisque, glazed, class, etc.). Keep it moving.
- Fill out a firing slip with the necessary information and pay for it at the front desk. The side marked paid will remain with your piece when placed on the proper shelf for firing and the second slip is to be kept in your class box which is located on your class shelving.
- Work left on the shelving to be bisqued that does not have a name and/or class code and paid firing slip will not be fired.
- In order to request a firing credit, you must locate the firing slip that you placed in your class box when you initially paid for the piece in question. Once you have located the slip, you must fill out a firing request credit form (located at the front

desk) and attach the firing slip with it. Leave the forms and piece in question at the front desk and you will be notified as to whether or not a credit will be given.

- TASOC is not responsible for lost firing slips.
- TASOC is NOT RESPONSIBLE for giving firing credit for undesired or inconsistent firing results, kiln accidents, or work that is lost or damaged.
- No new work should be produced the last two weeks of class. This time is meant to complete work.
- The electric kilns are loaded and unloaded for bisque and cone 6 on Mondays, Wednesdays, and Fridays on an as needed basis. Cone 10 firings happen roughly 1-2 times a semester. We need to have enough work to load the gas kiln to have a firing. The more cone 10 work that is produced, the more frequent the firings.

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Understand the Firing Cycle

- Once you have completed your work, it needs time to dry completely. Placing work into the kiln before it is completely dry runs the risk of exploding when the kiln reaches a certain temperature. When it is “bone dry” you can weigh your piece, pay for it, and put it on the “greenware” shelving.
- The electric kilns are loaded/unloaded on Mondays, Wednesdays, and Fridays based on enough work to do so. We cannot fire kilns that are half empty or guarantee work to be completed by a certain date. Please take this into consideration and plan ahead.
- After a piece is bisqued, it is ready to glaze. Pieces are bisqued to a low temperature, leaving it still porous allowing for the glaze to adhere to the surface.
- After glazing your piece, place it on the appropriate cone 6 or cone 10 shelving. Both are located in the kiln room and clearly labeled.
- Both the electric and gas kilns are loaded and fired when there is enough work to fill the kilns. A gas firing/cone10 needs approx. 4 days from firing to cooling to unload. The electric kilns need 2 days from firing to cooling to unload.
- Please make sure a piece is yours before you take it! Always sign with your name and class code the bottom of your work to avoid confusion. We also suggest that you take pictures and make notes of your work. Pieces get transformed in the firing, and you may not recognize your work.

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Glazing Protocol in The Studio

- No glaze, underglaze, or oxides on the bottom of any work. If you are adamant about using one of above on the bottom of a piece (even for a signature), you must provide a firing pad with your work. Your work will not get loaded into the kiln without a firing pad and will be placed on the reject shelf.
- If you are unfamiliar with a glaze or how the combination of different glazes work together, we advise that a test tile be made first. To spend all that time on a piece and then have it possibly get ruined, ruin someone else's work, or ruin a kiln shelf in the glaze process is frustrating and could cost money.
- If your work drips glaze or gets stuck to a kiln shelf, there will be a fee charged. Should a piece damage a shelf beyond repair (it can't be cleaned), you are responsible for the full price of the shelf, which can range from \$50-\$75 (depending on the shelf).
- No outside glazes allowed.
- All glazes are food-safe, unless otherwise noted on the glaze test tile board.
- There is a system to our glaze buckets. The glaze buckets are in the same order as the glaze test tiles hanging on the cone 6 and cone 10 boards. They are also labeled along the side edges of both tables. Please put back all glaze buckets in their proper place.
- Do not thin glazes; ask your teacher for assistance.

- Always leave lids on glaze buckets to avoid drying out and contamination.
- When done glazing, students should wipe down the glaze bucket and put it back in its correct spot.

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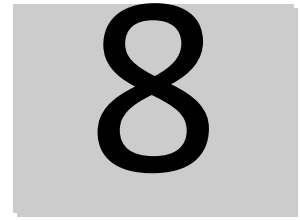
Glazing Tips

If you are inexperienced with the glazing process, please consult with your instructor before glazing your work.

Firstly, enjoy the process and make it part of the entire experience with your work. Secondly, make sure to set enough time aside for glazing your work. Thirdly, you should glaze your pieces as they become available and ready. This will allow and help you to make informed decisions the next time you glaze.

- Decide whether your piece is going to be glazed cone 6 or cone 10 (refer to your instructor for the differences, they are two different firings and types of glazes. The glazes cannot be used interchangeably).
- Keep a bowl with clean water & sponge near you.
- Clean piece with damp sponge to remove all dust particles.
- Cover an area at glazing tables with newspaper so you can wax the foot of your work.
- Put a small amount of wax resist in a container (Do not use wax resist straight from the studios container!) and use it on the bottom of your piece, continuing up about $\frac{1}{4}$ in. With the glazes already marked “runny/will run”, leave a larger raw area at the base. Make sure wax is dry before you start glazing.
- Decide on glaze and application technique. (i.e. dipping, pouring, etc.)
- Stir the bucket of glaze well, being sure to release all glaze from the bottom of the bucket.

- GLAZE
- Clean bottom of your work thoroughly – no glaze should be on the bottom of your pot.
- When using more than one glaze, make sure the first glaze is fully dry (to the touch) before applying the next glaze.
- Once your piece is glazed and the bottom is cleaned off, place it on the proper “to be fired” shelving area. The shelves are clearly marked cone 6 and cone 10. Cone 6 is done in the electric kilns and they are fired on a weekly basis. Cone 10 is fired 1-2 times/semester.



- Do not turn off air filter

Studio Basics

- Observe your time and start cleaning up 15 minutes before class or studio time ends.
- Do not enter the studio before the start of your class time.
- No tables or wheels can be saved.
- No children, friends, or pets allowed.
- Be courteous.
- No cellphones.
- Keep conversations quiet.
- If you are not receiving emails from the ceramic studio, leave your email at the front desk to be added.
- TASOC is not responsible for the loss or damage of work or personal property.
- No storing of personal items on shelves, we have limited space. Please be aware of the space you are using and keeping it fair with the rest of the class.
- Do not handle or touch the work of others.
- No student is to remain in the studio after closing (10pm).
- No sanding of your piece in the studio. You must do it outside and should wear a dust mask.
- Any work left out on tables after class or studio time will be discarded.

Want to get involved?

Volunteer

As a non-profit organization, there are many ways in which we could use your help! We are always looking for volunteers to help

us with events, monitoring open studio, studio cleanup, studio maintenance, and much more. If you are interested in helping out, please don't hesitate to reach out.

Join Work Exchange

The Work Exchange Program offers students the opportunity to assist at the school in exchange for a class. Students are chosen for Work Exchange at the beginning of each semester. Students are expected to fulfill their work exchange responsibilities/tasks in order to receive their free class.

Work Exchange for the studio is used to complete the following tasks:

- Electric kilns, loading and unloading
- Pugging
- Glaze making
- Glaze rehydrating

Work exchange students need to have a consistent weekly time in which they come to the studio, based on their availability. When you become a Work Exchange Student, we depend on you and expect it to be treated like any other paid position.

Basic Ceramic Vocabulary

BAT- A slab or platform on which clay is handled; a circular device attached to the wheel-head

BISQUE- Unglazed clay, fired at a low temperature.

BISQUE FIRING- The process of firing unglazed clay to a low

temperature to harden the clay and drive the physical water from it. The approximate temperature of this firing is 1815F.

COILING- A hand-building technique where snake-like pieces of clay are placed in a spiral formation, thereby building a cylindrical shape. The coils are then smoothed out so that the piece takes on a continuous contour. Only rarely are the coils left showing.

CONES- Small, elongated, three sided pyramids made of materials designed to melt at a specific temperature. Designed to melt at the same temperature as the glazes used. Cones indicate the progress of the melting. Cones are placed just inside the kiln during a firing so they can be seen through a peephole. The cones are one-time use only, and are available for a wide range of temperatures. They are numbered according to the temperature at which they melt. When discussing the temperature to which a piece/glaze is fired, reference is usually made to the cone used. The low fire range usually includes cones 06 through 01, intermediate fire includes cones 1 through 6, and high-fire includes cones 7 and up.

GREENWARE- Unfired pottery that is bone-dry, a state in which clay forms are absent of water and also the most fragile state.

HANDBUILDING- Any one of various techniques for creating ceramic objects that do not involve the use of a potter's wheel. These methods include coiling, slab building, and pinch pots.

KILN- Enclosed containers of various sizes- built of refractor brick and heated by electricity, gas, oil, or wood to temperatures from 1500°F to 2340°F in which pots are fired.

LEATHER HARD- Clay which is dried sufficiently to be stiff, but which is still damp enough to be joined to other pieces.

OXIDATION- In pottery this refers to a process that takes place during the firing stage of production. Oxygen in the air is allowed to enter the kiln to combine with elements in the clay and glaze. This is particularly important so that carbon and sulfur naturally occurring in clay can be "burned off." This takes place between temperatures of 1300°F and 2100°F. While all pottery firings go through a stage of oxidation, when it is allowed to continue throughout the entire process, it is called an "oxidation firing."

PINCHING- A technique of building pots entirely by molding the clay with the hands without coiling, using slabs, or throwing. Called pinching because it usually starts by a potter inserting a finger into a ball of clay and pinching the walls to thin and shape the pot.

REDUCTION- Refers to a glaze firing process or a glaze mixture that is best enhanced when going through this type of firing. What is actually being reduced is the quantity of oxygen that is chemically bonded to any metal oxides in the clay or glaze mixture. To bring about the removal of oxygen molecules, when the kiln temperature reaches the melting point of the glazes used the kiln atmosphere is "flooded" with combustible material, such as gas or wood, thus causing the fire to pull oxygen from the pieces being fired. The duration of the stage varies, but it can be as long as an hour or more. The removal of iron oxide in clay causes a "fluxing" (melting) action thus creating a stronger bond between clay and glaze. In the glaze mixture, reduction brings about a wide array of colors depending on the combination of materials used in the glaze. In general, reduction fired glazes tend to have what is considered warmer tones than those of oxidation glazes.

SHRINKAGE- An irreversible reduction in the size/volume of a ceramic piece or glaze that is caused during the drying and firing process.

SLAB- Also slab built. Any one of various techniques for creating ceramic objects that does not involve the use of a potter's wheel. In this technique, the clay is pressed into thin slabs that are then cut, assembled, and shaped into the desired form.

SLIP- A mixture of clay and water, usually with coloring agents in the form of metallic oxides. Mostly seen as brushwork, slips are best applied during the greenware stage of drying.

UNDERGLAZE- Colored decoration applied to bisque clay, then coated with another glaze.

VITRIFICATION- The process, induced by exposure to high heat, by which a material such as a clay or a glaze, melts and fuses together, thereby becoming solid and glass-like. This is what happens to ceramics and glazes during the firing process, and what converts a form made of soluble materials into an insoluble and permanent piece of ceramics.

WEDGING- Method of kneading clay to make it homogenous; ridding the clay of all air pockets.