



7300 MacArthur Boulevard, Glen Echo, Maryland 20812

Glen Echo Pottery Student Handbook

November 2019

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Welcome to all students at Glen Echo Pottery

We hope you will find that your classes hone your skills and stimulate your creativity. We also hope that you will feel welcome as part of this unique community of potters.

This Handbook is intended to explain Glen Echo Pottery's overall process for making pottery, provide a map of our facilities, introduce our many programs to new students and provide help with the vocabulary of clay.

It explains the rules and policies that govern the Pottery and keeps it running smoothly, and contains information on our many volunteer needs and activities and how you can sign up to help.

In addition to reading this Handbook, we recommend that you visit our website, www.glenechopottery.com, which provides further information. As a registered student, you may access the password-protected "Information for Continuing Students" page using the password **gep2013**. On this page, we post up-to-date information on kiln openings and other special events for students. There are slideshows and videos of special pottery events. There are also links to a local source of pottery supplies and to opportunities for special pottery workshops. You can reach the "Continuing Students" page through the website, or go directly to <http://www.glenechopottery.com/information-for-continuing-students.html>.

To receive official emails from Glen Echo Pottery, you must be on our student email listserv. We use these emails only for official announcements of special activities and events, so you won't get flooded with a ton of email. You may unsubscribe at any time. We never share the subscriber list with anyone. There is a "join our email list" button on the "Continuing Students" page of the website, or you can go to <http://goo.gl/wTG6jq> to fill in the brief form and submit.

I look forward to seeing you around the yurts.

Jeff Kirk
Executive Director, Glen Echo Pottery

ILLUSTRATED INTRODUCTION TO HOW WE MAKE POTTERY

The “pots” we make include functional pieces, such as soup bowls and mugs as well as decorative vases and sculptures. They range in size from miniatures to tall vases that could grace an entranceway.



Examples of work made at Glen Echo Pottery by instructors and advanced students and exhibited in the Popcorn Gallery at Glen Echo Park during May, 2017.

The basic methods are the same for all. (The terms below in **bold** typeface are defined in the Glossary at the end of this document or shown in the pictures.)

We form pottery from purchased wet **stoneware** or **porcelain clay** by using a pottery wheel or handbuilding techniques, or a combination of both. After the pot is **bone dry**, it is placed on the **pre-bisque shelves** in the kiln yard and fired (by appointed volunteers) for the first time in an electric kiln to the **bisque** stage.



The cooled pots are placed on the **bisque shelves** in the kiln yard, arranged by month that they were unloaded. The pots are now hard enough for glaze to be

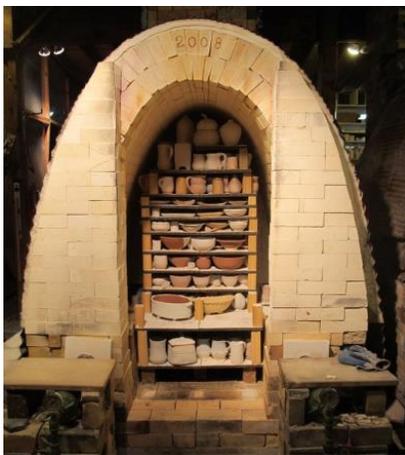
Bone dry pottery waiting on the pre-bisque shelves (left) before loading in electric kilns (middle) by an appointed volunteer, Gino Parisi (right).

applied. After the glaze has dried, the pots are placed on the **glaze shelves** in the kiln yard and fired a second time in a gas kiln (by Jeff Kirk, or his surrogate).



Bisque shelves (left). Pots being glazed in the glaze yurt (middle) are then placed on the glaze shelves (right) before loading in the gas reduction kiln.

Once loaded, the gas kiln is fired to about 2,300 degrees F (**cone 10**) which **vitrifies** the clay so that the pot can hold water and the glaze forms a glassy hard surface. We collect our pots and pay firing fees during the scheduled reduction **kiln openings**. If we can't attend, we collect them from the **treasure chest** in the kiln yard and pay our firing fees before taking them home.



The loaded gas kiln (left) prior to bricking up and firing. Jeff Kirk at unloading explaining how a pot was glazed (middle). Finished glaze fired pots in the "treasure chest" (right).

The details of how to accomplish this process are taught in our classes. These are generally 6 weeks in length with one or two sessions a week and the opportunity for adult students to also practice during the generous **open studio** times. Beginner/Intermediate classes in wheel throwing are offered Monday evenings and Saturday mornings in the **wheel yurt**. Intermediate /Advanced wheel classes are on Tuesday, Wednesday and Thursday mornings or evenings. Teen wheel classes for Middle and High School age students are offered on Tuesday and Thursday afternoons after school in the wheel yurt.

Handbuilding techniques large **handbuilding yurt** on Tuesday and Thursday or



Saturday mornings and on Wednesday evenings.

for adult students are taught in the **Gallery/handbuilding yurt** or the **small**



Tuition for all students covers instruction and the use of the facilities. Teen classes are provided with clay and tools and glaze firing without additional cost.

For all adult classes, the cost of clay, purchase of tools, and fees for firing are extra. Pottery rules, policies and current fees are detailed beginning on page 13 and copies of them are also posted in the wheel and hand building yurts and on the **Information for Continuing Students** page of the Pottery website (password **gep2013**).

The entry to wheel yurt (left) is marked by a Torii gate that honors the influence of ancient Japanese pottery traditions. The large Gallery/handbuilding yurt (middle) is down the hill and the small handbuilding yurt (right) is in between.

PROGRAMS

Adult Wheel

Beginner Through Intermediate. These classes provide substantial individual attention to students. Beginners are taught basic wheel techniques, wedging, centering clay, throwing bowl and cylinder forms, finishing and glazing. Intermediate students are provided instruction in more advanced skills that enables them to continue to evolve at their own level and improve their skills in clay. These classes include **Saturday Morning Wheel** and the **Introduction to the Potter's Wheel** class on Monday evenings.

Intermediate Through Advanced. These classes allow students to throw at their own skill level and evolve at their own rate. Using demonstration and critique, the instructor teaches a variety of intermediate and advanced throwing and altering techniques with an emphasis on shape, function, and surface decoration. Students explore functional and nonfunctional concepts, and learn about different clay qualities, slip application, and advanced glazing techniques. These **Continuing Wheel** classes are offered on Tuesday/Thursday and Wednesday both mornings and evenings. NOTE: These classes are **not suitable for beginners**. Potential students with some pottery experience should contact Jeff Kirk (jeffrogs@aol.com) to discuss whether their prior experience is sufficient before registering for an intermediate/advanced class.

See our website for more details: www.glenechopottery.com/adult-wheel



Demonstration by Instructor in an Intermediate/Advanced adult wheel class

Teen Wheel

Our teen class provides a basic introduction to the potter's wheel. Wedging clay, centering, throwing and decorating techniques are taught. We welcome students of all skill levels and encourage free expression in both functional and nonfunctional ware. Tuition includes tools, supplies and firing. The class is for Middle and High School age teens. Teen classes do not include open studio hours.

See our website for more details:
www.glenechopottery.com/teen-wheel



Student in a teen wheel class.

Adult Handbuilding

These classes focus on key handbuilding techniques including pinch, coil, and slab construction, plus surface decoration, glazing, and firing. Instructors provide individual guidance for all levels of experience, with special attention to newcomers. Experienced potters may pursue independent projects. Facilities, equipment and some tools, as well as glazes, are provided but students are urged to bring their own tools. Due to high demand, you may take only one handbuilding class per week, Tuesday/Thursday mornings, Wednesday evening, or Saturday morning.

See our website for more details: www.glenechopottery.com/adult-handbuilding



Handbuilding student in the Gallery/handbuilding yurt.

Soda Program

The standard glaze firing for all students at Glen Echo Pottery is in a gas reduction kiln, where glaze that is applied to the pots fuses to the clay to provide color and shine. In 2011, students and instructors built an “atmospheric” kiln in which sodium carbonate is added to the atmosphere at a specific temperature at which it vaporizes and combines with the clay surface to form an atmospheric glaze. This soda firing has become popular with intermediate and advanced students because it offers additional decorative possibilities beyond our standard glaze firings. However, it is a more difficult kiln to fire and requires training and a significant time commitment. The Soda Program provides opportunities for all students to see the results of soda firing through “drop off” firings (usually one a year) in which experienced advanced students do the firing and which is run as a fundraiser. In addition, workshops are offered where intermediate/advanced students receive training in how to do a soda firing. The soda kiln is also rented to small groups of advanced students who have been trained and are approved by Jeff Kirk. The Soda Program is administered by **Linda Epstein (lindaepstein5@gmail.com)**, who will provide further information about these opportunities for soda firing upon request.



Pots from a group soda firing.

Volunteer Program

The cost of tuition and fees at Glen Echo Pottery is low because much of the work at the Pottery is done by student volunteers who:

- mix the glazes we use for reduction firing
- load the electric kilns to bisque fire pieces
- help load the reduction kilns
- maintain the gardens adjacent to the kiln yard
- assist in teaching the introductory classes
- participate in the activities of the Kathy Darby Community Outreach Fund
- raise money for the Pottery by participating in special sale events
- serve on the Board of Directors that assists Jeff in managing and improving the Pottery

For more information about opportunities to participate in some of these activities, contact **Catherine Sabatos** (marycsab@gmail.com), who provides overall coordination of volunteer activities.



A volunteer wet mixing a glaze.

Gallery and Special Sales Program

The **Glen Echo Pottery Gallery** is open April through December from noon to 5 pm on the weekends and for extended times during special events in the Park. The Gallery offers advanced students the opportunity to exhibit and sell their pottery. It offers Park visitors and beginner/intermediate students alike the opportunity to see the variety of pottery that we make, as well as demonstrations of pottery making on most weekends. Becoming a member of the Gallery requires both approval by Jeff Kirk of the technical and artistic merit of a student's pottery, as well as a commitment to produce sufficient work and participate in all required Gallery activities. There are only 28 spaces available. The Gallery is directed by **Hope Walker** (hopewalk04@hotmail.com), whom you should contact for more information about how to join the waiting list.



For more information about the Gallery

see our website <http://www.glenechopottery.com/pottery-gallery.html>

and our Gallery Facebook page <https://www.facebook.com/GEPGallery/>

In addition to regular Gallery sales, the Pottery invites all students whose work has been approved by Jeff Kirk to participate in **special sales** during events at the Park, such as the annual Washington Folklore Festival in summer and the Labor Day Weekend Art Show. **Beverly Safranek (beverly.safranek@gmail.com)**, coordinates our special sale activities and will provide more information upon request.

There is also an annual **Seconds Sale** each September that functions as a fundraiser, organized by Board members **Joyce Forrest and Linda Epstein**, and two **Pots by the Pound** sales, organized by Mary Silva. All Glen Echo Pottery students are also invited to participate in the annual **Glen Echo Potters Holiday Sale**, held the first weekend in December and now in its 30th year!

An email invitation will be sent to all students (who have added their email address to our listserv!) before each of these special sales.



Community Education and Outreach Program.

To foster **community education**, the Pottery offers visitors to the Park the opportunity to see demonstrations of pottery making and the finished products in its Pottery Gallery, open weekend afternoons from April through December and for extended periods during special events in the Park. In addition, during our annual Popcorn Gallery exhibit of work made at the Pottery by instructors and advanced students, we provide docents who are experienced potters to educate the public as to how the pieces are made and the opportunities available for learning the craft at Glen Echo Park.

The **Kathy Darby Community Outreach Fund**, established in 2016 as a living memorial to long-time instructor, volunteer, and Board member Kathy Darby, provides pottery workshops for low-income youth in local schools and recreational community settings. The program will also seek to offer educational opportunities for low-income children in the Park and to extend scholarships to teens or other beginners who show talent and enthusiasm for pottery but may not be able to afford the tuition. The program is funded by donations from students and the community at large. The instructors are all volunteers.



A 2017 workshop supported by the Fund at a local school.

We also donate pots to: So Others Might Eat (Empty Bowls project), Maryland Foundation of Dentistry for the Handicapped, and Potters for Peace (supports poor rural women potters in Central America).

Information on opportunities to participate in these programs will be sent to students on our listserv and/or posted in the teaching yurts.

Map of pottery facilities in Glen Echo Park



Wheel yurt



Kiln yard



Glazing yurt

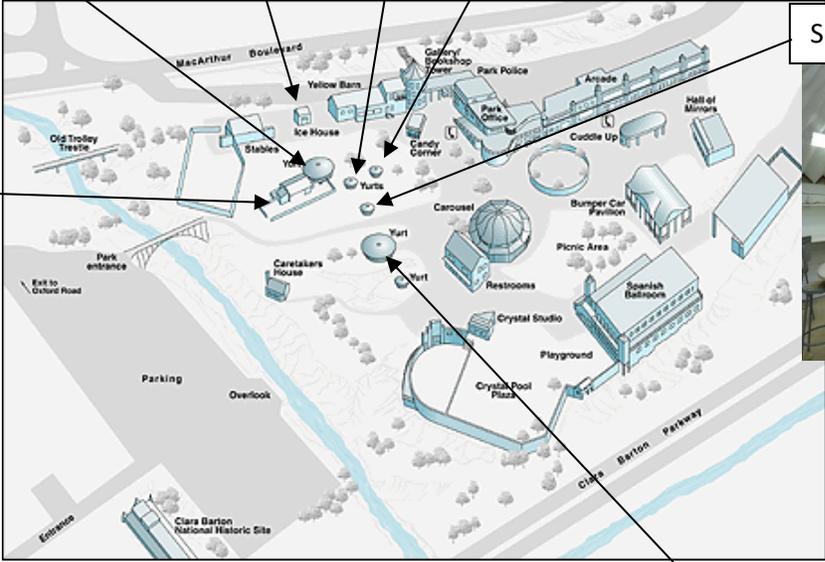
Ice house (dry mixing glaze)

Office yurt

Small handbuilding



Gallery/handbuilding yurt



PEOPLE WHO KEEP THE POTTERY RUNNING

Jeff Kirk is the **Artistic Director of Glen Echo Pottery**, as well as **Executive Director**, and the chief instructor for all the intermediate and advanced wheel classes.

Instructors for Handbuilding classes are **Kira Kibler, Mark Sistik, Rexford Brown, David Epstein, Antoinette Vionnet** and **Ana Carillo**.

Instructors and Assistant Instructors for Wheel classes are **Jeff Kirk, Linda Johnson, David Epstein, Joe Savage, Catherine Sabatos** and **Mike Friedman**.

Pictures and more information about each of the above may be found on our website Instructors page <http://www.glenechopottery.com/instructors.html>

We keep tuition low by extensive use of volunteers. **Volunteers** make glazes, load and unload bisque kilns, help load the reduction kiln, keep the garden watered and weeded, raise funds, serve on the Board of Directors, and with a myriad of other tasks. Key contacts for various volunteer and other activities include:

Soda firing program - **Linda Epstein (lindaepstein5@gmail.com)**

Glaze making organizer - **Penny Frost (frosthp@hotmail.com)**

Bisque firing - **Gino Parisi**

Pottery Gallery Director - **Hope Walker (hopewalk04@hotmail.com)**

Pottery website - **Jean Wrathall (jeanrwrathall@gmail.com)**

Volunteer activity coordinator - **Catherine Sabatos (marycsab@gmail.com)**

Board of Directors -

Cindy Deitch, Linda Epstein (Vice President), Joyce Forrest (Treasurer), Mike Friedman, Jeff Kirk, Julie Maltzman, Catherine Sabatos (Secretary), Marsha Slater (President), Hope Walker and Jean Wrathall.

RULES AND POLICIES

Rules for the Common Good:

1. Only cone 10 clay is allowed in the studio. Clay not purchased at the Pottery must be approved by Jeff Kirk or your instructor to ensure that it is safe to use in our kilns.

The kiln shelf seen at right was loaded with a pot made with low-fire clay that melted into a gray puddle in our cone 10 firing. It also permanently fused the large pitcher and sculpture of a dog that were next to it onto the kiln shelf and ruined the (very expensive) kiln shelf.



2. Clean up your work area **after each use**, as well as common areas and any supplies and equipment that you use. Dispose ALL clay residues in the slop bucket, put empty cans in the recycling container outside, and don't leave food in the yurts to attract mice.

3. Respect each other's space, supplies and work. All adult students are assigned specific storage bins for their clay by their instructors and told where the bins should be stored. Work areas and spaces for drying pottery are assigned by instructors in the handbuilding yurts. In the wheel yurt, most work space and much storage space is shared among students in different classes. This makes it especially important that we clean up after ourselves (# 2) and respect each person's space and work. For continuing wheel students, limited private storage space is available in the form of assigned shelves in the wheel yurt (contact Jeff Kirk) and/or rental cubbies in the kiln yard. (*Students are notified by email from the Pottery when a cubby is available for rent.*) The full names of the assigned students are on these trays, shelves and cubbies, and the contained items should be respected as their property.

4. Pay as you go. Bring cash or a check to pay firing fees and for purchase of supplies such as clay, tools, and wax. Place in the labeled metal drop boxes upstairs in the wheel yurt. We don't run tabs!



Policies:

Approved GEP Policy Pages (11/1/2018)

MAKE UP CLASSES

You may make up missed classes during the six-week session for which you are registered. Check with your instructor for alternate class sessions. Handbuilding students must make up classes in another hand building class that is held in the Gallery/handbuilding yurt. Teen wheel students must make up classes in another teen wheel class. Adult students from continuing wheel classes may not make up missed classes on Monday nights or Saturday mornings. If the Park is closed and class is canceled due to weather or other circumstances, you may make up the class by coming to any other appropriate scheduled class with the restrictions specified above. Please keep in mind that students enrolled in a class have priority, and if there is no room, you must wait until there is a free space. You may want to check with your Instructor to see which class times might be better than others.

COMPLETING WORK AFTER THE SESSION ENDS

Throwing and trimming of pots in wheel classes and building of pots in handbuilding classes are allowed only in the class session for which you are registered and may not be continued into the next session unless you are registered for that session. However, adult students may come to open studio to glaze your final bisque pieces after your class ends during the first 3 weeks of the next session. If needed, an extension for up to the full six weeks of the session may be obtained, but only with permission from your instructor. Your work will be fired in a timely fashion. Check with your instructor for kiln opening times and dates or on the Continuing Student page of the pottery website (password gep2013).

INCLEMENT WEATHER AND PARK CLOSURES

In the case of bad weather, the management of Glen Echo Park – not Glen Echo Pottery – decides whether and when to close the Park premises and cancel classes. If the Park is closed, then the Pottery is closed – no exceptions! Check the Park closing hotline for the latest advisory: 301-320-2330. The hotline is updated at 7 a.m. and 3 p.m. You can also check the Park website at <http://www.glenechopark.org>

CLAY POLICY FOR ADULT STUDENTS

Only cone 10 clay is permitted in the studio. All clay used by adult students must be purchased. The Pottery sells cone 10 clay at the cost of \$18 for a 25-pound bag of stoneware and \$25 for a 25-pound bag of porcelain. These prices are subject to change as required. Newer students should purchase clay available at the Pottery that is known to be safe in our kilns and for which our glazes have been tested. Any clay purchased elsewhere must be approved by Jeff Kirk or your instructor to ensure that it is safe in our kilns before it can be used at the Pottery.

Beginning-level adult students who are new to pottery and in their first class at Glen Echo Pottery will pay \$18 for an unlimited amount of instructor-chosen clay at the beginning of their first session. All such wheel

students should store this clay in the designated large gray bin to the left of the wedging table. This clay is reserved for the sole use of these first-time beginning-level students.

Beginning-level adult students in their second session and all other continuing adult students, both wheel and handbuilding, are required to purchase all the clay they use. Students will be provided with a personal clay storage bin by their instructor, in which their purchased clay bags may be stored, and shown where their tray may be placed. The bins must be labelled with the student's full name. These bins are large enough to store one or two 25-pound bags of clay; extra clay should be stored at home. Bins stored in the kiln yard can be moved inside during the winter. Jeff will assist those students with outside bins to find suitable inside space.

Students who have not registered for an additional session should turn in their clay bins at the end of their session. If they return as a registered student later, they will be issued a new storage bin.

In contrast to those in the adult classes, tuition for students in the Teen wheel classes includes clay that will be provided by their instructor. The Teen wheel class has a large communal clay bin in which their clay is stored. It is located on the left of the wedging table.

The Pottery stocks a limited quantity of an assortment of stoneware clays from which to choose; clays stocked and price are subject to change based on supplier and cost. In addition, as described below, we have an annual opportunity for students to purchase commercial clay at discounted prices.

Potters wishing to discard clay rather than personally recycle it should discard their clay in the slop bucket. The Pottery will arrange to have it emptied at regular intervals. Clay in any form should NOT be disposed of in the sinks, as it will clog the drains.

Payment for all clays, either cash or check, should be placed in the locked drop box labeled "Clay Fees" upstairs in the wheel yurt. Purchasers of clay should also fill in the form in the folder on the upstairs desk, indicating what clay has been purchased, how much, and how much has been paid.

Every year, we place an order for commercial clays for individual students and for the studio. Prior to the order, a designated volunteer will put a notice on the electrical panel in the wheel yurt listing the commercial clays available for purchase, the cost, and the deadline for ordering. Usually, only Laguna clays are purchased at this time. A message will be sent by email to all students on our listserv alerting them that the notice has been posted. All students are encouraged to purchase the amount of clay they anticipate they will need for the year to ensure they have the kind and amount they need. The cost is also less. If you do not see the commercial clay you wish to purchase on the notice, please talk to your instructor, as this may change over time.

Reminder: Only cone 10 clay is permitted in the studio. Clay not purchased through the studio must be approved by Jeff or your instructor.

GREENWARE SHELVES

Wheel students' pots that have been trimmed and signed should be placed on the greenware shelves to the left of the back door of the wheel yurt to await bisque firing. Care should be taken not to touch the work of others, as the clay is extremely fragile at this stage and easily broken if mishandled. Greenware should always be picked up with both hands from the bottom, never by the edge of the bowl or the handle of a mug. Handbuilders should get directions from their instructor.

Anyone who accidentally breaks another's pot anywhere in the greenware-through-bisque process should leave a short, signed note of explanation for the owner. The owner, in turn, should accept the note graciously, bearing in mind that these two roles could be reversed at any time. Accidents happen.

BISQUE SHELVES

When greenware is thoroughly dry, it will be moved by experienced volunteers to the pre-bisque shelves opposite the bisque kilns. It will be loaded into the electric bisque kilns by staff members or appointed experienced volunteers. The bisque firing can take up to three days, after which the pots are unloaded by staff or authorized volunteers onto the bisque shelves of the current month. Bisque shelves have a "pull date," which is two months after the end of the clearly marked firing month. For example, the shelves labeled January have a pull date of March 31. As the pull date approaches, potters should check the shelves for forgotten work and either glaze it or take it home. The bisque shelves are not meant for extended storage; work should be removed in a timely manner.

During the last week before the pull date, in order to make room for new work, all work meant for discard may be moved to another shelf, where it will be clearly marked. At the end of the month, according to the pull date, unclaimed work will be discarded.

SCHEDULE OF FEES (as of 11/1/19 -- subject to change)

Commercial Clays	\$18 per 25-pound bag for stoneware and \$25 per bag for porcelain
House wax	\$4-\$8 per bottle depending on bottle size
Beginner tool kits	\$24
Soda kiln rental	\$720

Bisque Fees

Your tuition fee pays for your class, open studio, and bisque firing of all pieces made at the Pottery.

As a school with very limited space, we have determined that we cannot accommodate significant amounts of work made in home or other studios. Please consult with Jeff if you have questions.

Glazing and Reduction Firing

Your tuition does not include glazing and reduction firing of your pots at the Pottery. You are asked to "weigh and pay" for your reduction-fired pots when picking them up. If you do not have sufficient funds to pay for your pots at the time of pickup, please leave the pots in the treasure chest until you can pay your fee. And there are no running tabs!

The fees for glazing and reduction firing in the Pottery are:

\$2 per pound for pots 9 inches and smaller in every dimension
\$3 per pound for pots larger than 9 inches in any dimension

There is a fee of 50 cents per pound for all pots glazed in the Pottery but fired elsewhere. This fee covers the cost of our glazes.

Note: Reduction firing fees apply even if you do not like your pots or decide not to take them home. The fees pay for the cost of glaze supplies and propane for firing, and by glazing and firing your pots in our kiln, you commit to pay these fees regardless of the end result.

Soda Glazing and Firing

The costs of soda glazes and firing are included in your soda kiln rental fee.

Community soda kiln firings \$3 per pound. A \$25 nonrefundable deposit, to be deducted from firing fee

Drop-off soda firings (Pottery fundraiser) \$ 5 per pound

Cubby Rental Fee: \$100 annually. Must be a wheel student and take at least seven of the nine wheel classes given over the course of one year. All students on our listserv are notified by email from the Pottery when a cubby is available for rent.

VISITOR POLICY

Glen Echo Pottery endeavors to maintain a good working and learning environment for all students, welcoming friends and visitors to our studios within those constraints. We are usually at full enrollment, and working and storage space are already tight. We seek to balance a desire to be open to visitors with a

need to ensure students have space to work and their work is protected. The GEP visitor policy has been coordinated with and fully approved by GEPPAC.

Wheel Yurt

- **The wheel yurt is off limits to visitors except for formal studio tours led by a Park Ranger or a pre-announced “open studio time” to support a GEPPAC special event in the Park. In both cases, these events would have been approved in advance by Jeff.**
- **Enrolled students are welcome to escort a family member or friend on a private tour around the studio during open studio hours only. Children must always be supervised by an adult.**
- **If a Park visitor enquires about taking a class and wants to see how the studio is organized, a current student may volunteer to escort that individual around the studio during open studio hours.**
- **If a Park visitor asks to come in despite the Student/Staff Only signs, please ask them to come back during a park special event. On a weekend between April and December, suggest they visit the Gallery yurt, where they may also see a wheel demonstration.**

Glaze Yurt, Kiln Pavilion

- **The glaze yurt is off limits to all visitors at all times. The kiln pavilion is also off limits except when an enrolled student is escorting a family member, friend, or a prospective student on a private tour during open studio hours.**

Gallery /handbuilding yurt and small handbuilding yurt

- **The Gallery is open to the public Saturdays and Sundays from noon to 5 p.m. from April through December.**
- **The handbuilding section of the Gallery yurt and the small handbuilding yurt is closed to the public at all times, although it is permissible for an enrolled student to escort a family member or friend on a private tour during open studio hours only.**

GLOSSARY OF POTTERY TERMS

BAT. A flat plastic disk that fits on top of the pottery wheel on which the clay is thrown. The batt has holes drilled for the wheel's bat pins to hold the bat in place. Some of our bats have 2 sets of holes, the wider set fits the electric wheel, the narrower, the kick wheels. After throwing, the pot is removed from the bat with a cut-off wire and transferred to an appropriately sized wooden ware board.

BISQUE. Refers to pottery that has been fired once to a lower than vitrification temperature and remains unglazed. We bisque fire using the electric kilns in the kiln yard to about cone 08 (about 1,700 F). The vitrification temperature of the clay we use is cone 10 (about 2,300 F). Our bisque fired pots are therefore strong enough to handle and dip in liquid glaze without deforming, the water in the glaze can still easily penetrate the surface, leaving the glaze solids on the pot when the water dries. After pots are bisque fired, authorized volunteers place them on the **bisque shelves** in the kiln yard arranged according to the current month.

BONE DRY. The condition of clay when all the water has evaporated. The clay is completely dry. A bone dry pot may feel "warmer" and often looks lighter in color than one that is not yet dry. Bone dry pots are delicate and must be handled with great care.

CERAMICS. From the Greek word "keramos" meaning "burnt earth." All those endeavors in which minerals are transformed by red heat into another form of material. Examples- pottery, glass, cements, plasters.

CLAY. A combination of fine grain mineral fragments. The result of decomposition of rock, possessing the properties of plasticity, porosity, and ability to vitrify.

DIPPING. A technique in which the piece is immersed in a slip, engobe or glaze bath.

EARTHENWARE. A category of pottery ware fired below cone 4 (low fire). It is relatively soft and porous and requires glaze to make it waterproof. **WE DO NOT USE EARTHENWARE CLAY AT GLEN ECHO POTTERY. IT WOULD MELT IN OUR GAS KILN.**

FIRING. The process of heating clay work in a kiln to partially or completely vitrify it. Firing permanently transforms the clay to a rock-like state and melts glazes.

GLAZE. A silicate (glass-forming) mixture with water that is applied to clay surfaces and melts into a hard coating when fired. Bisque fired pots are taken to the glazing yurt, where there are buckets of all the approved Pottery glazes for our reduction firings. Once the glazed pots are dry they are taken to the glaze shelves in the kiln yard that are near the big gas reduction kiln. (Note that there is a separate glazing area and other glazes for students who are participating in the soda firing program.)

GREENWARE. A ceramic piece that has been completed and but not yet fired. We place bone dry greenware on the pre-bisque shelves that are next to the electric kilns in the kiln yard.

GROG. Fired clay that has been ground into a sandy sediment. It is available in different grain sizes and is used as a filler and textural agent. It also aids in preventing clay slabs from warping.

KILN. An oven or furnace in which clay wares and glazes are fired. We have 3 electric kilns that we use for bisque firings (to cone 08, about 1,700° F) and 2 large gas powered kilns that we use for glaze firings to cone 10 (about 2,300° F). We also have a separate gas powered soda kiln.

KILN WASH. A mixture painted on the top surfaces of kiln shelves to protect them against glaze drips and runs.

LEATHER HARD. The condition of unfired clay about midway in moisture content between plastic and bone dry. The clay has lost its plasticity but looks moist.

MATURATION. The ideal condition of fired clay, when it has been fired as high as possible, stopping short of sagging or slumping of the form from excessive melting. The clay is as hard as it can be and still holds its form (i.e., is not melted into a puddle).

MISHIMA. A decorating technique in which lines are carved into leather hard pieces and then filled (before or after bisque firing) with a contrasting color of underglaze or slip.

OPEN STUDIO. Time when no class is scheduled and any currently registered adult student may use the facilities on a first-come first-served basis. Students may NOT use the facilities in the daytime on Mondays. (Pottery maintenance activities occur on Mondays.) The wheel yurt has open studio time all day on Fridays and Sundays and between/after scheduled classes on Tuesdays –Thursdays and Saturday. The class instructors should be contacted for open studio times in the handbuilding yurts. Note that the Gallery operation on Saturday and Sunday afternoons restricts potters use to only part of the large Gallery/handbuilding yurt on the weekends. Teen classes do not include open studio time.

PLASTICITY. A property of clay that enables it to take and hold any impression.

PORCELAIN. A very fine grained pottery clay (or wares made with it) that when fired is usually pure white. The particles in porcelain pack together very tightly so that even thin porcelain can be very strong. It was developed by the Chinese over 1000 years ago.

(PYROMETRIC) CONE. The temperature gauge used when firing a kiln. Commercially prepared cone shaped pieces of clay that melt at specified temperatures. An Orton cone rated for 08 melts at about 1,700° F, and one rated cone 10 at about 2,300° F. When we bisque fire, we use an 08 cone that melts at 1,700° F to trigger the kiln to turn off. For our gas kilns, we use a set of different temperature cones and peek into the kiln as it's firing to see when cone 10 begins to melt and we need to turn off the gas.

REDUCTION FIRING. Our standard glaze firing at the Pottery uses gas powered kilns that we fire so that the air (thus oxygen) available in the kiln is less than optimal, producing a “reducing” atmosphere that interacts with chemicals in the glazes to produce different colors and visual effects than if oxygen was freely available. (In contrast, electric kilns fire in an oxidation or neutral atmosphere.)

TREASURE CHEST. The name for a series of wood cabinets outside in our kiln yard where we store glaze-fired pieces that were not picked up at kiln openings. These cabinets are locked except during class times or when an instructor has opened them. Pots should be weighed and the firing fee paid before taking your pieces home. Unclaimed pots are stored for 3 months; after that they are transferred to bins to be sold in a “pots by the pound” sale with proceeds going to the Pottery.

SODA FIRING. Soda (sodium carbonate) is added to the kiln. The soda will vaporize at about 2,300° F and combine with molecules in the clay to form a glassy substance (sodium silicate) even on otherwise unglazed areas of the pots. Other special effects occur that contribute to the popularity of this type of firing. One of our gas kilns at Glen Echo was built for such soda firings and is used for special drop off and firing workshops as well as by groups of advanced potters who reserve and rent the kiln for their own firings. More information about the soda firing program may be obtained from Linda Epstein, who directs the program.

SGRAFFITO. A decorative technique where a slip or underglaze coating on the surface of a pot is incised or scratched through to uncover the color of the clay beneath. The color of the line drawing contrasts with that of the coating.

SLIP. Clay made fluid with water and to which colorants may be added, used for decoration. When made from the clay being formed, it is also used like mortar for sticking two pieces of leather-hard clay together. We have white, blue, brown and black slip available for all, as well as soda firing slips for those in our soda firing program.

STAIN. A colorant solution applied or burnished onto a bisque surface. The color may come from metal oxides or carbonates (e.g., iron oxide = brown; cobalt carbonate = blue) or commercial (e.g., Mason) stains.

STONEWARE. A category of clay (or wares made with it) which reaches maturity at higher temperatures and is very strong and durable.

UNDERGLAZE. A manufactured pottery pigment for application on greenware or bisque prior to glaze application. It often has a matte finish. Potters at Glen Echo should check that any underglazes they purchase have colorants that will survive cone 10 firings.

VITRIFIED. A mature stage of stoneware clay or porcelain after high firing. The clay is waterproof even without glaze.

WARE BOARD. Wooden boards on which drying pots are stored. We have many different sizes. Please use the smallest available on which your pot will fit, as storage space in the Pottery is a challenge.

WAX RESIST. Wax is applied in a design to bisqueware. After it dries, glaze is applied over the piece. The waxed area will resist the glaze. After firing, the design will show in contrast to the glazed areas. Wax can also be applied to bottoms of pottery when applying glaze with the dipping technique. The wax burns off during bisque firing. We use water soluble rather than candle type wax so melting is not required for use.

WEDGING. A method used to prepare clay. It is a technique closely related to kneading bread. Wedging is done to achieve a number of things: (1) All clay particles and platelets are mixed and organized into uniformity (homogeneous); (2) Air bubbles are removed; (3) Moist clay can be dried to a workable state. The two wedging techniques we teach are called, “ram’s head” and “spiral”.

This Handbook was produced under the auspices of the Glen Echo Pottery Board of Director.

We thank Bruce Douglas for the images from our 2017 Popcorn Gallery exhibit on page 4, and the students and instructors who contributed images of other Pottery activities.