

# STUDENT HANDBOOK

GREATER LANSING POTTERS' GUILD 8099 COLEMAN ROAD, HASLETT MI 48840 517) 339-8978

## STUDENT HANDBOOK

## INTRODUCTION

The Greater Lansing Potters' Guild (Guild) is a non-profit corporation comprised of potters who share a common bond of commitment to clay and to a cooperative setting in which to work. It was incorporated in 1968 and is operated by the active membership. There are no paid personnel at the Guild except teachers. One purpose of the Guild is to sponsor instruction for the community. For this purpose, the Guild's Education Committee organizes and schedules adult student classes.

We welcome you as a student to our Guild. We want your time here to be pleasant and productive, and we hope that this experience will increase your enjoyment and appreciation of the ceramic arts. This handbook outlines the student program, provides tips on pottery making, and establishes the "ground rules" for student participation in the Guild.

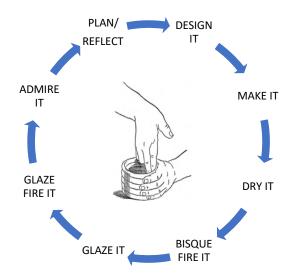
The Guild is committed to providing a cooperative and interactive environment for all students regardless of their experience in working with clay. The Guild reserves the right to deny future enrollment or other opportunities to any student who does not adhere to Guild's rules and procedures or is inconsiderate of others in their use of the facility or its resources.

## **STUDENT PROGRAM**

Class Terms: Each term includes ten class periods, and an 11<sup>th</sup> session for picking up pots after the final firing. Students may enroll in up to ten (10) terms of instruction. Depending on class availability, students may take the ten terms consecutively or intermittently. Students who have completed ten terms may be placed on a waiting list and may be eligible to enroll in additional terms only when there is an opening in a class.

Class Hours: Classes meet once per week for three (3) hours each session. This time includes instruction, hands-on practice, and cleanup. Classes are held on Mondays at two available times:

Morning Session: 9:00 AM – 12:00 PM
 Evening Session: 6:30 PM – 9:30 PM



**Teachers**: Our teachers are qualified individuals who either hold an advanced degree in ceramics or have decades of experience as professional potters and/or artists. Students are expected to work with the teacher to set realistic individual goals in pottery making.

**Class Assistant**: A Guild member is present during class and is available to explain Guild work rules, make schedules, take attendance, and assist students and the teacher in matters concerning the student program. Please inform the class assistant when you are going to miss a class due to illness or other factors.

#### Potter's Mark

Your "Potter's Mark" is a small icon, your initials, or other "signature" by which you and we can identify your pots. Once you know what you want to use, make a note of it on the posted class roster.

## **Norms & Expectations:**

- Please arrive to class a few minutes early since the instructor's demonstrations usually take place at the beginning of the class period.
- Regardless of your skill level, students are expected to actively participate in class and observe the
  demonstrations. Each teacher offers fresh perspectives and approaches to pottery. As your skills increase,
  you will notice different things.
- Openly communicate with your instructor and class assistant relative to your pottery needs and desired outcomes for the term. Always feel free to ask for help and/or critiquing, as needed.
- Cell phones should not be used during class. If you need to take a call, please excuse yourself and take the call outside of the classroom.
- Headphones should not be used during class time. They may be used during the labs.
- Guild towels are to be used for clean hands. Bring your own towel for use at your workspace.
- Use of heat lamps for drying pots should be used sparingly. If the weather outside is not conducive for drying and there is a special need to speed up the drying process, it is permissible to use the lamps.

**Tuition**: Fees for classes include the cost of instructors, use of the workshop and appropriate equipment during classes and lab hours, plus glaze materials, utilities, and other costs associated with the student education program. Although the Potters' Guild tries to keep tuition costs low, changes in operating costs may necessitate adjustments in the tuition rates.

**Tuition Refund**: A full refund will be made if a cancellation is received two weeks before the first class. A prorated refund will be made for cancellations after the first class ONLY if your spot can be filled.

Lab Hours: Lab hours are scheduled <u>between</u> the first and last class of the term. Any student may attend any or all the lab sessions. Each week, a three-hour day session, a three-hour evening session and a six-hour Saturday session are scheduled. Before the last class, additional lab hours are scheduled for the prior Sunday. A lab monitor (Visiting Potter or Guild member) is present for lab hours. The lab monitor is available to assist students but is not supposed to act as an instructor. The lab hours and volunteer monitors are posted on the Education bulletin board.

Weekly lab hours: Mon: 12 – 3 PM Wed: 6:30 – 9:30 PM Sat: 9 AM – 3 PM

## **Basic Tools Suggested for Students**

Put your name on all your tools using a permanent marker or other waterproof system. There is a lost and found bucket by the sink.



## **FACILITIES, EQUIPMENT AND MATERIALS**

Students may use most of the Guild's facilities, equipment and materials **except** for the pug mills, the compressor, and experimental and members' only glazes. A portable cardboard spray booth may be set up and used in the clay room, permanent glaze spray booth, or outside, once instruction on its use has been given. Other restrictions, identified in this Handbook and by the class assistant, must be followed.

Guild equipment and materials are not to be taken from the Guild, except for your clay allotment. Glaze material and /or clay from outside the Guild are **not** to be brought into the Guild. Our clay and glazes have been formulated to work effectively in our kiln. "Foreign" materials may contaminate our supplies and/or cause damage to your work or others. You may use underglazes that are purchased from elsewhere, if they can be fired to Cone 10 and are used in combination with Guild glazes

**Student Shelves**: Each student is assigned a shelf for storage of personal items, tools, clay, and ware. A few drying shelves for student use are available; however, for your peace of mind and control over your ware during the drying process, arrange your own shelf to accommodate drying of your work to the maximum extent possible.

**Clay**: Each student is provided with 50 pounds of clay per term. Up to 50 additional pounds may be purchased from the class assistant during the term. Only Guild clay may be used by students and fired in the Guild kilns.

## Types of Clay at the Guild

#### Stoneware

Stoneware clay is a durable clay that becomes **vitrified** and non-porus when fired at high temperatures, creating a strong, water-tight, and dense material. Its composition of quartz, feldspar, and ball clay, along with impurities like iron, gives it a naturally rustic texture, good workability, and a stone-like toughness after firing.

- Recycled made at the Guild from a variety of recycled clays.
   Most economical and good for a variety of ware and beginning students.
- Laguna 850 typically used by beginning students because it contains grog which adds a gritty, rustic texture called "tooth" which reduces shrinkage and helps the clay dry evenly. It also helps clay structures to stand taller without slumping.
- •Standard 182 (with or without grog) a white stoneware that fires with a grayish tone.
- •Standard B-mix\* (with or without grog) a white stoneware
- •Laguna 900\* red stoneware for more advanced students

## Porcelain

Porcelain is known for strength, durability, whiteness, smoothness and transparency. It is a very high fire clay (Cone 10 or higher) that is premium priced and for experienced potters.

- Standard 257 English Porcelain\*
- •Laguna 550 English Porcelain\*

\*Cost differences for the alternative clays must be paid to the class assistant in cash or online through the provided QR Code, at the time of purchase. Clay with grog is the best choice for beginners, hand builders, as well as for those making pieces for raku firing.

**Scrap Clay**: Scrap clay is clay from the cleanings off your wheel or work area, trimmings from tooling, and other very wet scraps. Most clay is reusable—do not throw it away unless it is contaminated with such items as glaze

materials or dirt. Everyone is encouraged to collect and recycle their own scrap clay. If you do not want to do that, place the clay into the barrels covered with grating by pushing it through the grates.

Examine your clay scraps carefully for sponges, tools, needles, chamois, plastic, and other foreign objects. They are dangerous when left in the clay or placed in the recycle barrels. Recycled clay containing underglazes should not be placed in the Guild's recycle barrels. Place **contaminated clay** (e.g., floor sweepings) into trash cans.

**Sinks:** Use only the sink in the main room to wash clay from tools, bats, pans, and hands. First, rinse these items so that most of the clay goes into the clay slop barrels to minimize the amount of clay that goes down the sink. Then wash them in the plastic pans in the sink then rinse with water from the tap. This saves ground water and minimizes clay accumulation in our plumbing.

**Glaze Materials:** Batch glazes are for everyone's use. Samples of these glazes are on display. If you are considering overlapping glazes, consult the glazing guidelines and discuss details with your teacher or class assistant because many overlaps can have unfortunate results. Some glazes are labeled for "members only" or "experimental" and these are not for student use.

**Sieves:** Sieves are fragile and expensive. Use only brushes to force glaze material through a sieve. Never use a spoon or any hard object on sieves. After use, wash sieves thoroughly.

**Plaster:** Plaster of Paris, or plaster in any form (e.g., powder, bats, molds) is not allowed in the studio. Gypsum board (dry wall) may be used only if raw edges are taped.

**Usage of library materials**: Books, magazines, and videos are available in the Guild library. Students cannot check out these materials but can look at them during class or lab times. Students should always "check-in" with the class assistant or lab monitor when using the Guild library.

Clay Weight Chart for Common Items – A place to Start					
Make adjustments as needed for your clay body, based on wall thickness and foot style.					
Finished After Firing	Clay in lbs./oz.	Height (in.)	Width (in.)		
6 oz. Coffee Mug	10 oz.	3	3		
8 oz. Coffee Mug	14 oz.	5	3		
14 oz. Beer Mug	1 lb. 5 oz.	7	3.5		
Large Dinner Plate	4 lb.	1.25	11.5		
Medium Dinner Plate	3 lb.	1.0	10		
Large Bowl	5 lb.12 oz.	6	12		
Medium Bowl	4 lb.	4.5	10		
4 Quart Casserole	5 lb. 12 oz.	8	12		
2 Quart Casserole	4 lb.	4.5	8.5		
1 Pint Pitcher	1 lb. 8 oz.	6.5	4.0		
4 Pint Pitcher	5 lb. 12 oz.	14	6		
Large Teapot	4 lb. 6 oz.	8	8		
Medium Teapot	3 lb. 6 oz.	6	6		
Small Teapot	2 lb. 3 oz	4.5	5.0		
Large Storage Jar	5 lb.	12	5		
Medium Storage Jar	3 lb. 6 oz	10	4		

Source: Lakesidepottery.com

Height & Width are Thrown Measurements

Note: Clay shrinks substantially (12-15%) during the drying and firing processes.

## **OPERATIONAL PROCEDURES**

A general sequence of events occurs in the studio:

1. Making of piece 2. Drying 3. Bisque Glaze Firing 5. Glaze Firing

Events 1, 2, and 4 are your responsibility. Guild members will take the ware through the firing steps. Glazeware is fired when there is sufficient ware to fill the glaze kiln. Within reason, student ware has priority in all glaze firings except the last firing before a sale.

#### STATES OF CLAY



## Slip/Slurry

- •Clay that is mixed with water into a pudding-like consistency.
- •It may be used for joining clay, slip trailing.



## **Plastic**

- •Soft and workable clay that can be molded, wedged, or rolled into slabs.
- •Clay that maintains its shape without cracking or sagging.
- •It may be used for hand-building, extruding, and wheel-throwing.



## Leather Hard Greenware

- Pieces that have not been fired. Clay that has hardened slightly.
- •Clay or ware that is ready for joining pieces and/or trimming.
- •It is ideal for carving, burnishing, distorting, and building hard slab constructions.



## Bone Dry Greenware

- Pieces that have not been fired. Clay that is completely dried.
- •When bone dry, pieces are very fragile. Only handle your own pieces.
- Fill the back of the cart first on a shelf of appropriate height.



## **Bisqueware**

- •Clay that has been fired once.
- •Ware that is ready for stain, slips, underglaze, and glaze.
- •Claim your bisqueware as soon as available and store on your shelf.



## Glazed Bisqueware

- •The foot of your bisqueware piece has been waxed at a minimum of 1/4".
- Droplets of glaze have been cleaned off the bottom.
- •Meaure and record on student points pages and fill out a non-white kiln slip.
- Fill the back of the cart first on a shelf of appropriate height.



#### Glazeware

- Pieces that have been glazed and fired a second time.
- •Students, members, and visiting potters are all asked to leave their pieces on the glaze shelves for 3 days for others to have an opportunity to learn from their results.

**Clean Up**: Each student is to clean up the area where he/she works — wheels, work areas, glazing area, wedging areas, slab roller, tools, bats, and floors (i.e., everything). Cleaning sponges, brooms, dust pans, and brushes are in ample supply for easy and efficient clean up. Any clay swept off the floor is to be placed in the trash can, not in the scrap clay barrel. <u>Turn the wheel off when you are finished</u>.



## **Health and Safety:**

- Glaze materials may cause skin irritation in some people; therefore, we recommend wearing protective gloves when glazing.
- The Guild is a smoke-free environment.
- We have instituted a no-fragrance policy to protect those with sensitivities and ask that you avoid wearing scented products wherever you are in the Guild.
- If you do not feel well, please try not to expose others, either by not coming to the studio or by wearing a mask.
- Children or guests are not permitted in the Guild during class.
- Pets are not permitted at the Guild.
- Sanding greenware or bisqueware should be done outside. If done inside, sanding puts dust and fine clay
  particles into the building AND lungs. If weather is not conducive to sanding outside, you should sand over
  the recycle barrels in the clay room so that the particles fall into some water to prevent them from
  becoming air borne.

## **Firing Schedules:**

Check the firing calendars to find dates for bisque and glaze firings. The Guild does its best to schedule firings in a timely and convenient manner for students. However, scheduling is dependent upon the amount of ware available to stack. Every effort will be made to schedule bisque and glaze firings throughout the term so that students may have early feedback.

The class assistant will inform students when a firing is scheduled and give deadlines for ware to be on the appropriate carts. This will include an <u>absolute deadline</u> for bone-dry greenware to be on the cart for bisque firing prior to the end of the term. This will allow you time to glaze your bisque pots and get them into the student glaze firing after the last class session.

**Last Class**: All work on ware is to be completed by the end of the tenth class period. If you have completed your work prior to the last day, the class period may be used for further practice, instructor critique, or individual research in the Guild library. There will be no lab hours after the last class.

**Before leaving be sure that your shelf is cleared and cleaned**. Even if you are enrolled in a class the following term, you must remove your tools, materials, ware, and personal items from the Guild.

#### **Guild Sales:**

The Guild holds pottery sales semiannually, usually before Thanksgiving in November and before Mother's Day in May. Currently enrolled students are invited to enter up to eight (8) pots juried by the class assistant.

## **GLAZING AT THE GUILD**

#### **Glaze Definitions:**

A glaze is a liquid suspension of finely ground minerals which is applied by brushing, pouring, dipping, etc. onto the surface of bisque fired ceramic ware. After drying, the ware is fired to the temperature at which the glaze ingredients will melt together to form a glassy surface coating. The three basic components of a ceramic glaze consist of the following:

- 1. Glass former Usually in the form of silica (sand), it gives a glazed pot a glassy surface.
- 2. Flux Fluxes are added to glazes to lower the melting temperature of the silica to a range attainable in a ceramic kiln.
- 3. **Stabilizer** Usually in the form of alumina, a stabilizer both increases the viscosity of the melted glass (glaze) to prevent it from running off the pot during firing and allows the glaze to stay in a glassy state as it cools.

Although a glaze is a glass, an unmodified silica glass requires too high a temperature before melting to be of practical use in ceramics. Fluxes are added to lower the melting temperature of the silica to a range attainable in a ceramic kiln. To prevent the melted glaze from running off the pot, a stabilizer is included to increase the viscosity of the melt and disrupt the recrystallization of the glaze components during cooling.

#### Glass Former + Flux + Stabilizer = Glaze

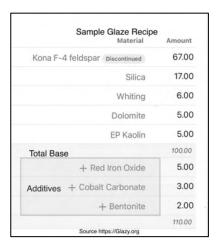
#### **Frequent Additives to Glazes:**

**Colorants** – usually oxides or carbonates of heavy metals.

**Flocculants** – usually bentonite or Epsom salts – are added to maintain glaze components in suspension and to prevent them from settling to the bottom of the container.

The characteristics of a specific glaze are determined by the exact amount and type of ingredients in the above categories. The goal is to create a glaze that meets the user's requirement for:

- A workable firing range
- Color
- Clay body fit
- Translucency or opacity
- Texture
- Gloss level



The batch glazes at the Guild have been formulated and rigorously tested to perform well under the firing conditions of our kilns. When glazes are overlapped or mixed, the combined chemical composition can alter the effective flux, and result in problems with glazes running or crazing. Hence, students should proceed with caution and consult the instructor or class assistant when considering glaze overlaps.

## **DECORATING SLIPS AND STAINS**

There are several available for all to use, usually brushed onto small areas. Sample tiles in the glaze room show the appearance of slips under and over a selection of our glazes. The slips stick well to bisque ware but can also be applied to greenware. The following are technically engobes because they contain enough flux to be used alone without flaking off or feeling rough but may also be used effectively in conjunction with many glazes. Here are a few highlights of the most popular:

Slip	Effect
Blue	Reliable but appearance is altered significantly by thickness of application
Brown	Reliable but appearance is altered significantly by thickness of application
Black	Often turns out brown when thin; may bubble and turn silvery if too thick
Green	Is never green in color; more like dark gray
Yellows	If too thin, they aren't very yellow; if too thick, they are prone to run

The following must be used with a transparent or translucent glaze:

Slip/Stain	Effect
Bringle White	Is medium gray, and best used on leather-hard greenware
Porcelain	Is white and best used on leather-hard greenware
Pinnell Green	Is bright grass green and will stick to bisque ware
Iron Oxides	Are usually brushed on and then partially wiped off to create variation in the base
	clay color or to provide emphasis of texture

## **GLAZING GUIDELINES**

## **Preparing Ware for Glaze:**

- 1. Remove dust and dirt from bisqueware with a clean damp sponge. If the piece was sanded extensively and/or has nooks that are hard to wipe down, then it's a good idea to rinse it in the sink and let it dry overnight.
- 2. Apply wax resist to foot of pot up to 1/4" from bottom (that part of the ware that sits on the kiln shelf). It's a good idea to measure your pieces and write down the dimensions before waxing the bottom.

## **Preparing the Batch Glaze:**

- 1. Check the batch glaze. If there are more than two (2) inches of water standing on top, ask the teacher or class assistant for help in determining if water should be removed. **Do not make the adjustment yourself**.
- 2. Stir glaze thoroughly, scraping the ingredients off the inside bottom of the bucket with a spatula. For best results, re-stir regularly during use.
- 3. If the glaze appears to be too thick, check with a lab monitor or instructor for assistance.

#### Applying the Glaze:

The single biggest factor under your control that affects the results of your glazing efforts is glaze thickness. For most glazes, the thickness of a dime when dry is a good goal.

- 1. Apply glaze to bisqueware by pouring, dipping, or brushing. (See application recommendations below.)
- 2. Wipe off glaze from foot of ware. Clean off 1/4" from bottom to accommodate glaze expansion and running.
- 3. Take care to return all unused glaze back into the bucket that it came from only. Unlike paints, many glazes look alike, so



please pay attention to what you are doing. If you are unhappy with the application, the glaze can be scraped back into the same container provided it has not been layered with other glazes. You can use a dry toothbrush to remove it.

- 4. If the glaze is too thick on your pot or you are unhappy with application, wash off glaze and allow to completely dry before applying another glaze (glaze will not adhere to a wet pot). However, doing this is wasteful of the Guild's resources and your own time, and therefore should NOT be routine procedure because you forgot what you put on it or just changed your mind. Do NOT adulterate or alter glazes on purpose or accidentally.
- 5. Glaze Tips may be found in an index card box on the windowsill of the glaze room. These tips provide important information for the edification of all.

## **Application Recommendations:**

- Do not use experimental or "member only" glazes (these are clearly marked).
- Check with your instructor or class assistant before you glaze a piece to determine the best method of application.
- Glaze thickness is adjusted to the way in which it is applied. When dipping, longer dips mean thicker;
   shorter dips mean thinner. One or two seconds is usually long enough for most glazes. Pouring can often result in very heavy glaze buildup. Spraying provides the most control of

glaze thickness.

- When testing the effects of overlapping glazes, only overlap on the top half or on the inside of the pot to avoid glazes running off and damaging the kiln shelves. Check with your teacher or class assistant about specific glaze combinations.
- A general rule of thumb is that most shiny glazes tend to move and may ultimately run more than less glossy glazes. Chun, Amber Celadon, Blue and Red Pinnell, and Angel Eyes glazes are most prone to running because they need to be applied slightly thicker for desirable color development. Beginners should refrain from using them except on the upper portion and insides of ware.
- The #6-based glazes are the most forgiving (#6 with Opax, 1% & 2% Rutile, Barb's Blue, and Turquoise, Pan's Gray)



## **Measuring and Recording Pots:**

The points system is a method of tracking the amount of ware to be glaze fired, measured in cubic inches (one cubic inch equals one kiln point). Each student is credited with 6000 kiln points at the beginning of the term. This is translated to a maximum of 6000 cubic inches of ware that can be fired during any single term by one student. Kiln points cannot be accumulated from term to term, nor are they transferable to other persons. Intermediate and advanced students are expected to be sufficiently discerning about their ware to fire only those pieces that demonstrate quality work and aesthetic value. Your teacher and class assistant can help you make such judgments.

- 1. Measure for cubic inches (height x depth x width). Use the chart in glaze room. For any fraction of an inch, use next higher whole number. Minimum height for any pot is two inches, regardless of actual height. Note that height is the first measurement; this measure helps the stackers place pots on shelves that accommodate 2", 3", 4", and larger sized pieces, enabling efficient and cost-effective stacking of the kiln.
- 2. Record the dimensions and running total points in Student Points Book.

EXAMPLE: Cumulative Total Celadon bowl Ht  $4" \times 6" \times 6" = 144$  144 Segar blue vase Ht  $10" \times 5" \times 5" = 250$  394

3. Fill out the kiln slip and place it beside or under your piece on the proper ware cart using the same careful procedure as when handling greenware. Place your pieces towards the back of the cart and fill towards the front to avoid additional handling. Do not put pieces that are of short height on cart shelves that are suitable for tall pieces.

	Sample Kiln Slip	
Name	Jane or John Doe	
Date	9/20/2025	
Glaze	Amber Celadon	
Ht	<u>4"</u> x <u>6"</u> x <u>6"</u> = <u>144</u>	
	(Record Height first – Minimum of 2")	

## **Additional Pottery-Related Terms**

Bat	A disk or slab of wood or plastic on which pottery is formed or dried.
Batch Glaze	Large volume of glaze made from raw chemicals weighed to specific proportions
	designed to melt at predetermined temperatures and mixed with water.
Clay	Decomposed granite type rock with finely sized particles making it plastic.
Engobe (Slip)	Clay slip with colorants used to decorate leather hard ware and bisque ware.
Foot	Ring like base of a ceramic piece, usually thicker than the surrounding body.
Glaze fire	A firing cycle of a kiln to the temperature at which the glaze materials will melt to form
	a glass like surface coating.
Grog	Finely ground bisque added to some clay bodies to enhance texture, reduce shrinkage
	and enable even drying.
Hand Building	A method of making pots using slabs of clay and/or using techniques such as coiling
	and pinching.
Kiln Furniture	Shelves and shelve supports (stilts) used in kilns to hold ware.
Maturity	Temperature or time at which a clay or clay body develops the desirable characteristics
	of maximum non porosity and hardness; or to the point at which the glaze structure,
	achieves maximum resistance to abrasion, and a pleasant surface texture.
Oxides	Any element that is combined with oxygen. Oxides are used in pottery for color and
	sometimes referred to as <b>stains</b> .
Oxidizing Fire	A fire in which the kiln maintains an ample amount of oxygen. Electric kilns give an
	oxidizing fire.
Raku	A relatively low temperature firing method, done in the open, using Raku specific
	glazes
Raw Ware	Unfired ware; also called greenware.
Reduction Fire	A fire in which combustion is incomplete, and no free oxygen remains in the kiln
	chamber, thus causing the metallic coloring oxides in the glaze and body to lose
	oxygen and to revert to their basic metallic forms.
Turning	The trimming of the walls and foot of a pot on the wheel while in the leather hard
	state.
Ware	Pottery or porcelain in the raw, bisque or glazed state.
Ware Cart	Carts on which ware, ready for firing, is placed.
Wedging	Kneading plastic clay with the fingers and heel of the hands in a rocking spiral motion,
	which forces out trapped air pockets and develops a uniform texture.