

UNIT 2

UNDERGLAZE

Requirements:

(Refer to requirements Unit 1 - 4 on page 2)

Basic Information:

Underglazes:

- (1) Are usually applied to greenware and fired before glaze is applied.
- (2) May be applied to bisque (but rarely done because of difficulty in application and poor end results). This is not recommended unless underglaze label suggest this type of application.
- (3) May be thinned, with underglaze media or water, for desired consistency.
- (4) May be intermixed to create color variations. Refer to types of underglazes.
- (5) May be applied with brush, sponge, airbrush or a variety of other available tools.
- (6) May be used in a sgraffito technique.
- (7) Must be applied smoothly because they do not move in firing.
- (8) Require specific cone firing as indicated on underglaze label.

Types of the most common underglazes:

- (1) Opaque underglaze is usually made from a clay base, and should not be mixed with different kinds of underglaze, or any of the glaze types. It is mostly used for solid coverage, and can be thinned with underglaze medium or water.
This type of underglaze works well for:
 - (a) Figurines.
 - (b) Blocking in design work (i.e. as eyes, flower petals, etc.).
- (2) Transparent underglaze is made with concentrated colorants, and less clay base. It is usually thinned with an underglaze medium or water.
This type of underglaze works well for:
 - (a) Brush stroke work.
 - (b) Tinting specialty glazes (i.e. Froth, Snow, etc.).
 - (c) Airbrushing.
- (3) Specialty underglaze is usually made with a frit base. It can be mixed with its own kind. Very rarely can it be mixed with other ceramic media. The most popular colors in this type are red and orange. It is recommended to follow the manufacturer's instructions for proper application.

There are new and improved ceramic media introduced daily. **It is very important to read all labels for recommended application and firing instructions.**

Have your project leader, parent and/or ceramic studio help you choose your greenware and underglazes. They will be able to assist you in your choices and guide you.

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PROJECT 1

Basic Information:

- (1) This project will be a lesson in making basic (human) eyes.
- (2) First year members in Unit 2 will use a tile for this learning experience.
- (3) *Repeating members and seniors may use any plain surface piece.*
- (4) This project will be considered as one of your required pieces. **Learning projects are usually not entered in competition.**
- (5) You may be using tools, brushes, and a glazed tile from Unit 1.
- (6) Other tools and brushes you may need to purchase:
 - (a) Sgraffito tool.
 - (b) Round brush (#2 or #4).
 - (c) Liner brush (#1).
- (7) You will learn more new ceramic terms from your leader and/or the glossary (page 65).
- (8) Keep accurate notes as you proceed.

(Eyes for you)



Looking to one side

Looking straight ahead

Both eyes must look the same direction.

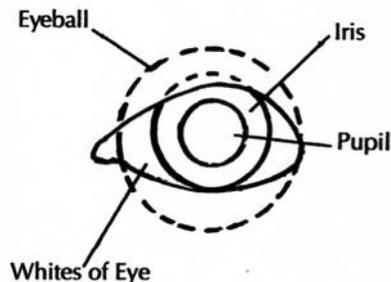


Illustration by Sharon Kinzie

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Steps:

- (A) Select suitable greenware (tile or any flat surface piece).
- (B) Prepare work area with suitable covering.
- (C) **Follow the safety rules.** Refer to page 3.
- (D) Clean greenware as outlined on page 4. Initial and date the bottom of piece for identification.
- (E) After you have checked your piece for seam lines and imperfections, wipe the piece down with a damp sponge to remove the excess dust .
- (F) Place opaque flesh color underglaze on a glazed tile (your work tile).
- (G) Apply even coats with a one inch nylon glaze brush over entire piece.
Read label for number of coats recommended. Let your piece dry completely.
- (H) Using a dull pencil, lightly sketch in three sets of human eye shapes. Also, you may place tissue wrapping paper over the eye illustration and trace the out-lines, using a dull pencil. Place the pattern on your piece and trace with a "Extra Fine Pilot pen". The ink will go through the tissue and leave the out-line on your piece. **You must use a pilot pen when doing this.**
- (I) Block inside the eye with 3 coats of opaque white underglaze using a Round brush. Let your piece dry completely.



- (J) Sketch in the iris (the colored part of the eye) using a dull pencil. Refer to the illustrations for the placement of the iris.



Looking right.



Looking Left.



Looking straight ahead.

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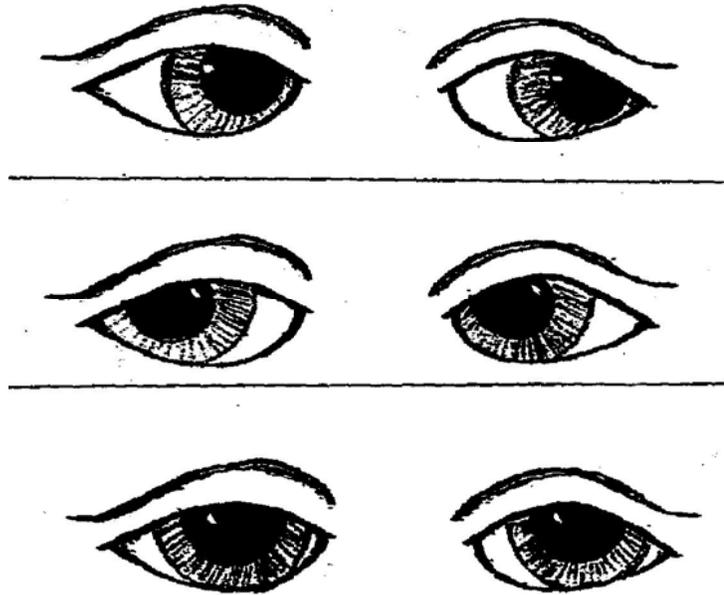
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Steps Cont:

- (K) Paint in the iris with 3 coats of desired opaque underglaze color using a Round brush (i.e. Blue or brown tones). Let your piece dry completely.
- (L) Using the dull pencil, sketch in the pupil (black part of the eye). Refer to the placement of pupil from the illustrations below. Notice that the pupil is placed toward the top of the eye. The eyelid covers about $\frac{1}{4}$ th of the eye.

Be sure to place the highlights on the same side of each eye.

The highlight is the reflection of light in the eyes.



- (M) Place the highlight in the eyes with white opaque underglaze with a Liner brush. *The members who are repeating Unit 2 and seniors may sgraffito through damp underglaze into greenware to indicate highlights.* Be sure to place the highlights on the same side of each eye.
- (N) With the liner brush and black underglaze place a line over eyes for lashes. *Repeating members and seniors may brush in the individual lashes.*
- (O) You may want to put a dot of pink in the tear duct area.
- (P) Clean brush with soap and water. Rinse and reshape the brush.
- (Q) Have the piece fired to the proper cone.

- (R) Prepare work area.
- (S) After cleaning the piece with a damp sponge apply two coats of clear glaze.
- (T) Clean the glaze brush with soap and water. Rinse and reshape the brush.
- (U) Fire to the proper cone.
- (V) Remove stilt marks.
- (W) Complete your E-record project and expense supplement sheets.
- (X) Evaluate your project using the Unit 2 guide line for judging on pages 7 and 8.

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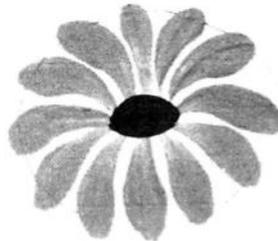
PROJECT 2

“Please Don’t Eat the Daisies”



Basic Information:

- (1) Project 2 is a brush stroke study using translucent underglazes.
- (2) Learning brush strokes is similar to learning to play a musical instrument. You may want to practice the basic brush strokes, on paper or on a clear polypropylene sheet protector, until you feel comfortable to apply your learned skill on your piece. Try designing several Daisy patterns on paper to practice the brush stroke.
- (3) This project will be considered as one of your required pieces. **Learning projects are usually not entered in competition.**
- (4) You may need to purchase a Round brush (#4 or #6).



Brush stroke illustration

Place a polypropylene sheet protector over the brush stroke illustrations and practice the brush strokes. After you fill the page, just wash the protector off and repeat the process. Remember that you do not need to stay within the boundaries of the detail. This is known as “free brush”. Perseverance is very important and the reward comes with your sense of accomplishment.

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Steps:

- (A) Select suitable greenware (i.e. box, small vase or plate).
- (B) Prepare work area.
- (C) **Follow safety rules.** (Page 3)
- (D) Clean greenware with proper tools (Initial and date the bottom of piece/s for identification).
- (E) After you have checked for seam lines and imperfections, remove excess dust from your piece using a damp sponge.
- (F) Trace or sketch a Daisy pattern on to the piece (if making a box, use the box lid).
Members repeating this unit or seniors may want to design their own pattern.
- (G) Wash the new brush with soap and water. Rinse the brush and reshape.
- (H) Place a translucent yellow underglaze on your work tile.
- (I) Dilute the underglaze, with underglaze medium or water, to a canned milk consistency.
- (J) Rinse brush again and shape by pulling the brush across a paper towel.
- (K) With a well loaded brush start at the top of the petal and use a point, pressure and pull back to a point brush stroke. In doing this, you are creating a “fat rounded” top, with pressure. You are then easing the pressure to form the more narrow part of the petal, and ending by pulling the brush from the object to make the final point. A delicate hand is better than a heavy hand. With practice you will learn how much pressure to put on your brush. Keep turning your piece so you are pulling your brush stroke toward yourself. You may need to rinse your brush and thin your underglaze often.
- (L) Clean the work tile well. Dilute a orange yellow translucent underglaze to a canned milk consistency.
- (M) Using the handle end of the detail brush, fill the center (the calyx) with dots of orange yellow.
- (N) Place yellow green translucent underglaze on your clean glazed work tile and dilute to a canned milk consistency.
- (O) Fill in the leaves using the same brush strokes as used on the petals.
- (P) Dilute a small amount of black green translucent underglaze on the clean work tile. Thin to light cream consistently.
- (Q) Using a #1 liner outline petals and leaves. Place dots inside calyx. Refer to illustration for placement. Paint stem from flower downward toward bottom. Using the liner brush put your name or initials beside your daisy. When making fine lines, your brush must be vertical. As you use very little pressure on your brush, you will be able to make nice thin lines.
- (R) Clean the brush and reshape.
- (S) Fire to the proper cone (Be sure to have the box lid fired onto box bottom).

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- (T) Prepare working area.
- (U) After cleaning the piece with a damp sponge, apply two coats of clear glaze. Be sure the piece is dry before applying the second coat.
- (V) Clean your brush and reshape.
- (W) Fire to proper cone.
- (X) Complete your E-record project and expense supplement sheet.
- (Y) Evaluate your project using the Unit 2 guide line for judging on pages 7 and 8.

Colors and pattern for project 2 are suggestions only. You may want to design your own pattern and/ or choose different colors. Be creative!!

The secret to brush work is learning to relax and to control the brush. The more you practice the more you will relax and your brush strokes will improve.



Brush work illustration

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PROJECT 3

Basic Information:

- (1) **Magnificent!!** You have completed projects 1 and 2.
- (2) Skills Learned:
 - (a) Application of opaque and translucent underglazes.
 - (b) Making Human eyes.
 - (b) Basic Brush strokes.
- (3) You are ready to complete project 3 which may be your exhibit piece.
- (4) This will be your “design and create” piece. You may use the skills you have learned or apply a new skill (Refer to the Ceramic Knowledge and Goals List for ideas).
- (5) If time permits you can complete several projects.
- (6) Evaluate your piece using the Unit 2 guideline for Judging on pages 7 and 8.

Suggestions:

- (1) Before choosing your piece, and if you have the opportunity, go to several ceramic studios to see what is available.
- (2) Look through ceramic publications for technique ideas. Check references on page 70.
- (3) Be sure to stay within your unit medium (underglaze).
- (4) You may want to change your piece by alternating the design of the greenware (Greenware adaptation).

Steps:

- (A) Follow cleaning steps as outlined on Page 5.
- (B) Decide on the technique you wish to achieve. Your leader will guide you. If you do not have a ceramic project leader, contact your Extension Agent. He/she may be able to connect you with a local leader or a knowledgeable person. If neither is available, check to see if there is a Ceramics Leaders’ manual available for more advanced information.



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CERAMIC CHECK LIST:

Identify the following tools/brushes and brush stroke:









What I learned about the care of my ceramic brushes: _____

What I learned in this unit:

Well Done!! By completing 3 or more projects, exhibiting E-records and one project you have completed this year's Unit.

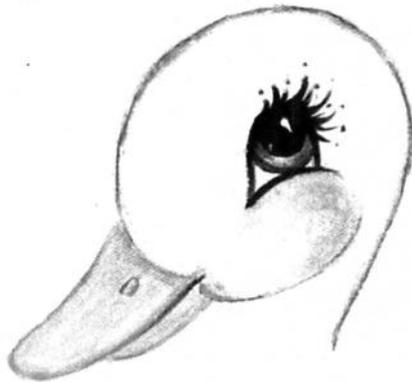
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CERAMIC KNOWLEDGE AND GOAL CHECKLIST:	New skills I have learned.	Skills I want to learn or improve.
Altering the greenware pattern for a special effect.		
<u>Detail work</u> with Opaque underglaze on an embossed piece (using a figurine or highly detailed piece).		
<u>Antique</u> with underglazes (usually with a detailed piece) .		
<u>Polish</u> with Opaque underglazes (Southwest Indian technique that has been passed down for generations).		
<u>Texture</u> technique (using thickened Opaque underglaze to form a textured pattern or background).		
<u>Veiling</u> technique (designing work using Translucent underglaze and a sponge).		
<u>Sgraffito</u> technique (scratching a design through an underglaze).		
<u>Stencil</u> technique (a cut out pattern used to apply a design by brushing, sponging or air brushing).		
<u>Brush work</u> with Transparent underglaze (a design where the strokes of the brush are apparent).		
<u>Simulated China painting</u> (using Transparent underglazes, double and triple loading the brush with several colors to give a feeling of China painting).		
<u>Majolica</u> (underglaze design applied over Satin or Matte glaze).		
<u>Air Brush</u> (a device generated by an air compressor). Solid coverage can be achieved, as well as design work and subtle shading.		

Put the date when you learned the skills. Place a check mark in the column of skills you would like to learn. Discuss skills you would like to learn with your leader. She/he will be able to give you hints as how to achieve your goal.

Check the glossary for more information on each of the skills.



Artwork by Sharon Kinzie