

Overglazes



Image Source:
https://www.galleryjapan.com/element/main_rwd/technique/images/kv_dtl_ceramics_overglazeenamel_sp.jpg

Unit 6

Project Requirements

Create one functional or decorative art piece that is at least 4" in width or height and no larger than 12" in width or height using overglaze techniques. The art piece may be either purchased greenware, bisqueware or a hand-constructed piece created by the member. Judging will primarily be on the quality of overglaze application and firing techniques.

- Enter the Overglazes Hand Constructed class if the exhibit item was made by the member.
- Enter the Overglazes Purchased Greenware/Bisque class if the exhibit item was purchased by the member.

Basic Information

Overglazes are usually applied over a glaze. They may also be applied over polished Porcelain bisque. Overglazes are mostly used for decorative purposes. Most overglazes, fuse to, but do not become part of the glaze. For that reason, they are mainly used for decorative rather than utility items. Check with the manufacturer for food safe information.

Types of Common Glazes

1. Lusters:
 - a. Gold
 - b. Platinum
 - c. Copper
 - d. Mother of pearl
2. Decals
3. Enamel
4. China paste
5. China paint

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 overglazes. They will be able to assist you in your choices and guide you. Keep accurate notes as you proceed. Evaluate each of your projects using the guide for judging.



Image Source: https://ceramicartsnetwork.org/images/default-source/uploadedimages/wp-content/uploads/2019/01/kane-tolosa-finished-01-1.jpg?Status=Master&sfvrsn=9c8fb49d_0

Overglaze Technique Checklist

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

Ceramic Knowledge and Goals Checklist	New skills I have learned	Skills I want to learn or improve
Altering the greenware pattern for a special effect.		
Making my own design using several decals.		
Combing several overglazes.		
Application of enamels.		
Application of China paste.		
Application of China paint.		
Application of an overglaze not listed. Name of overglaze:		

Unit 6 – Overglaze Decals and Mother of Pearl Project 1

Basic Information

You will be learning how to apply a decal and Mother of Pearl. Most decal designs are made with China paint and/or enamels on a film. The film fires away and the design fuses onto the glaze. You may try these techniques on two separate pieces or on one piece (purchased or made by you). If using decals and Mother of Pearl on the same piece, always apply and fire the decal first. Decals require a hotter firing than the Mother of Pearl application.

Repeating members and seniors may create an original design using a variety of different patterns and sizes when using decals. This project will be considered as one of your required pieces. Learning projects are usually not entered in competition. Be sure to include pictures of this activity in your record book. You will learn more new ceramic terms from your leader. Tools and brushes you may need to purchase:

- Turntable to aid you when you are applying lusters.
- A fumes and dust respirator mask.
- A squeegee for applying decals.
- A brush for Mother of Pearl application ONLY



Image Source: https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcT8A0KG_zlDz0hsSubsamdKTaU7RFYbT--Lbg&w=1000&h=1000

Steps for Decals

1. Select suitable greenware or bisqueware (small figurine, vase or plate) or make a piece using the techniques from units 1, 2, 7, 8, or 9.
2. Prepare a work area with a suitable surface or covering.
3. Follow the safety rules.
4. Clean greenware. Initial and date the bottom of the piece, and fire to the proper cone.
5. Keep accurate notes as you proceed.
6. After cleaning the kiln dust from the piece, wax the bottom of your piece then apply a glaze of your choice as a base color. No more than two colors should be used on your piece for the base of your piece.
7. Clean your brush with soap and water. Rinse and reshape the brush.
8. Fire your piece to the proper cone size.
9. Clean the piece to be decorated with denatured alcohol.

Unit 6 – Overglaze Decals and Mother of Pearl Project 1

Steps for Decals Continued

10. Consider the placement of your decal(s) and make a plan for where you want to place it/them on your piece, you can mark the spot with a small dot in non-permanent marker just above the area where you want to place it/them if you would like.
11. Place the decal in water until the decal curls up tightly. The water should be room temperature or lukewarm.
12. Remove the decal from the water and place on the clean glazed piece until the decal unfurls.
13. With the backing paper still in place, position the decal face up on the piece. Holding the decal in position with your thumb, gently slip out the backing paper.
14. If you are having a problem removing the backing paper, ask your leader for helpful suggestions.
15. Slide the squeegee over the backing paper to remove some of the adhesive. This will let the squeegee slide across the decal without tearing it. Work out all of the water and air bubbles, working from the center out, in all directions.
16. Repeat the above steps if you are putting more than one decal on your piece.

17. Clean the squeegee with soap and water, rinse and let it dry.
18. Allow the decal to dry twelve hours before firing. Read decal packaging for proper firing cone temperature.
19. Complete your e-record and expense supplement sheets.
20. Evaluate your project using the Unit 6 guideline for judging.



Steps for Mother of Pearl

1. Wash your Mother of Pearl application brush with soap and water at home so it has time to dry before the next workshop. Label your brush "Mother of Pearl."
2. Select suitable greenware or bisqueware (small figurine, vase or plate) or make a piece using the techniques from units 1, 2, 7, 8, or 9. You may also use the same piece you applied your decal(s) on if desired (if you choose this option skip to step 10).
3. Prepare a work area with a suitable surface or covering.

Unit 6 – Overglaze Decals and Mother of Pearl Project 1

Steps for Mother of Pearl Continued

4. Follow the safety rules.
5. Clean greenware. Initial and date the bottom of the piece, and fire to the proper cone.
6. Keep accurate notes as you proceed.
7. After cleaning the kiln dust from the piece, wax the bottom of your piece then apply a glaze of your choice as a base color. No more than 2 colors should be used on your piece for the base of your piece.
8. Clean your brush with soap and water. Rinse and reshape the brush.
9. Fire your piece to the proper cone size.
10. Clean the piece to be decorated and your brush with the denatured alcohol and/or essence and let dry.
11. Wear a proper respirator mask as well as rubber gloves, plastic wrap or a paper towel while handling the piece and placing it on a turntable while working with the Mother of Pearl medium.
12. Load the brush with Mother of Pearl, clean one side of the brush on the side of the bottle, to remove excess. The brush should not be loaded to the metal ferrule.
13. With a light touch, swirl the Mother of Pearl in a small circular motion. The Mother of Pearl is typically dyed a blue coloring so you can see your application. Turn the turntable as you work.
14. Reload your brush when needed. Do not over-work the brush strokes. Let the piece dry twelve hours before firing to proper cone (follow manufactures instructions). Be sure to use paper towels or wear gloves when moving the dry Mother of Pearl piece. Ask your leader to give you more information if needed.
15. Clean your brush in clean essence, then alcohol and finally with soap and water. Store this brush away from your other brushes.



Image Source: <https://preview.redd.it/iridescent-shimmery-glazes-i-am-a-total-beginner-here-but-v0-6wx80o5l0fb61.jpg?width=1077&format=pjpg&auto=webp&s=94eba38f95f8b6f1e8a6544ff132ac2b2c547169>

Unit 6 – Overglaze Enamel and Lusters Project 2

Basic Information

In this project you will learn how to apply enamel overglazes and lusters to a piece that is already glazed. You may try these techniques on two separate pieces or on one piece (purchased or made by you). Enamel overglazes are made of powdered glass and pigments that you typically mix with an oil or other type of liquid medium and brush onto glazed pottery. Lusters are typically fine ground minerals and metals that can be applied with certain mediums to add details and accents to a piece. Enamels and lusters have been used for centuries in jewelry and pottery originating in Asia. You can look up some of the traditional styles and uses on the internet to help inspire you how to use it on your piece. This project will be considered as one of your required pieces. Learning projects are usually not entered in competition. Be sure to include pictures of this activity in your record book. Tools and brushes you may need to purchase:

- Turntable to aid you when you are applying lusters.
- A fumes and dust respirator mask.
- Select a variety of soft synthetic brushes (nylon or polyester) for water-based enamel paints, or natural bristle brushes (goat or squirrel hair) for oil-based enamels.

- Plastic paint palette for mixing enamel paints.
- A dedicated natural haired brush or soft synthetic brush for lusters. Lusters require dedicated brushes for each luster used to avoid cross contamination as other materials can ruin your metallic finishes.



Image Source: https://ceramicartsnetwork.org/images/default-source/uploadedimages/wp-content/uploads/2018/08/kane-tolosa-04.jpg?sfvrsn=a59e897f_0

Unit 6 – Overglaze Enamel and Lusters Project 2

Steps for Enamels

1. Select suitable greenware or bisqueware (small figurine, vase or plate) or make a piece using the techniques from units 1, 2, 7, 8, or 9.
2. Prepare a work area.
3. Follow the safety rules.
4. Clean the greenware as outlined. Initial and date the bottom of the piece and then fire to proper cone temperature.
5. Keep accurate notes as you proceed.
6. After cleaning the kiln dust from the piece, wax the bottom of your piece. Next, apply a gloss glaze or other base glaze of your choice depending on your piece, with your glaze brush. No more than two colors should be applied for your base colors.
7. Clean your brush with soap and water. Rinse and reshape the brush.
8. Fire the piece to the proper cone size.
9. Wash the new enamel dedicated brush(es) with soap and water and then wash with denatured alcohol and/or essence at home so it has time to dry before the next workshop. Label your brush(es) "Enamel Only".
10. Prepare a design for your piece that you want to apply with your enamel paints.
11. Prepare a work area.
12. Clean the glazed piece and let it dry.
13. Prepare your enamel paints by putting the pigmented powders in individual sections of the paint pallet and then mixing them with the proper ratio of water or oils based on the instructions from the manufacturer.
14. Carefully paint on your design keeping in mind the knowledge you have learned from the Ceramics Elements and Principles of Designs from the beginning of this book, the color wheel exercise for mixing, and your planned out design as a blueprint for applying your design to the piece.
15. Fire your piece for a third time at the proper temperature as suggested by the manufacturer.
16. Clean your brush(es) in clean essence, then with denatured alcohol and finally with soap and water. Store these brushes, alone, away from your other brushes to avoid cross contamination.
17. Complete your e-record project and expense supplement sheets.
18. Evaluate your project using the Unit 6 guidelines for judging.

Unit 6 – Overglaze Enamel and Lusters Project 2

Steps for Lusters

1. Select suitable greenware or bisqueware (small figurine, vase or plate) or make a piece using the techniques from units 1, 2, 7, 8, or 9. You may also use the same piece you applied your enamels on if desired (if you choose this option skip to step 9).
2. Prepare a work area.
3. Follow the safety rules.
4. Clean the greenware as outlined. Initial and date the bottom of the piece and then fire to proper cone temperature.
5. Keep accurate notes as you proceed.
6. After cleaning the kiln dust from the piece, wax the bottom of your piece. Next, apply a gloss glaze or other base glaze of your choice depending on your piece, with your glaze brush. No more than two colors should be applied for your base colors.
7. Clean your brush with soap and water. Rinse and reshape the brush.
8. Fire the piece to the proper cone size.
9. Wash the new Lusters dedicated brush(es) with soap and water and then wash with denatured alcohol or essence at home so it has time to dry before the next workshop. Label your brush(es) "Lusters".
10. Clean the glazed piece and let it dry.
11. Wear a proper fumes and dust respirator mask as well as rubber gloves, plastic wrap or a paper towel while handling the piece and placing it on a turntable while working with any luster mediums.
12. Apply the luster medium of your choosing to your piece with detail and care to add an elevated touch of elegance to your piece.
13. Fire your piece at the proper temperature as suggested by the manufacturer.
14. Clean your brush in clean essence, then alcohol and finally with soap and water. Store this brush away from your other brushes.
15. Complete your e-record project and expense supplement sheets.
16. Evaluate your project using the Unit 6 guidelines for judging.



Unit 6 – Overglazes Exhibit Piece

Basic Information

Fabulous!! You have completed Projects 1 and 2. You are ready to create your Project 3 which may be your exhibit piece. The skills learned in this unit include:

- Decal application
- Application and proper use and handling of lusters
- Application and use of enamels
- Mixing ratios for overglaze mediums

You may use one of these skills by themselves or in combination. If you are having a hard time deciding, ask your parent, leader, or local ceramic studio for advice.

Suggestions

1. Before choosing your piece, and if you have the opportunity, go to several ceramic studios to see what is available.
2. You may want to change your piece by alternating the design of the greenware.
3. Refer to ceramic publications and websites for technique ideas.
4. You might want to obtain information from your local library.
5. Be sure to stay within your unit medium (overglazes).

Steps

- 1 Select suitable greenware or bisqueware (small figurine, vase or plate) or make a piece using the techniques from units 1, 2, 7, 8, or 9.
- 2 Follow cleaning greenware steps as outlined on page 34.
- 3 Decide on the technique you wish to achieve.
- 4 Clean, wax the bottom, glaze and fire your piece appropriately following the steps you have learned in the overglaze projects.
- 5 Complete ceramics e-record. Include Learning Projects on the specific information page:
 - Proper application of decals
 - Proper application of Mother of Pearl
- 6 Evaluate your piece using the Unit 6 guidelines for judging. Ask your leader for help.

Guidelines for Judging Your Project

Show Creativity and Originality

Judges will consider your age, experience, and techniques used when they are judging your project for creativity and originality.

Clean-up and Construction – no larger than 4" x 12"

Judges will look at the following construction characteristics of your exhibit:

- No evidence of seam lines or imperfections;
- All drip marks removed any drip marks that were stuck to the kiln shelf and had sharp edges have been grinded off and smoothed out
- Piece sits evenly on table, stilt marks removed (felted or smooth)
- The bottom of piece is clean and smooth with no signs of sticking to the kiln shelf
- No nicks, chips, or rough areas
- Lids fit
- Thickness of piece and rims are even

Appearance of finished product – glaze techniques

Judges will look at the following finishing characteristics of your exhibit:

- Proportion and balance of design
- Glaze should not have pinholes
- Should be clear not cloudy
- No unwanted crazes or cracks
- Glaze should have an even application—no streaks
- No rough areas or dust pockets; design should not appear too small or too large
- All vessels need to be finished inside, bottom and/or pour gate need to be finished
- Does glaze enhance the piece?
- Artistic Elements: Color
- Value – Good dark/light balance
- Intensity – Good contrast between bright and dull areas
- Harmony – Pleasing arrangement of colors that work well
- Relation to Design – Does color enrich design? Is it an important part of the design?
- Appropriate for either functional or decorative use