Beginning Ceramics Final Exam Study Guide

Your semester exam will be completed at the scheduled time. There are a variety of multiple choice, T/F questions, totaling 70 points total. If you are a student who would like to utilize your predetermined accommodations at the time of the final, it is important that you notify your teacher by Monday May 18th 2015.

CLAY FACTS

1. Rocks in mountains weather and erode from wind and rain. This eroded material makes clay. Clay comes from the weathering of a rock called ____FELDSPAR____________. It is found in Granite.

2. We **wedge** (kneading soft, plastic clay on a porous surface) for several reasons before we begin our projects. List all four reasons we wedge clay:

   1 ___TO MIX EVENLY THROUGHOUT_______________________
   2 ___TO REMOVE AIR BUBBLES THAT CAUSE CLAY TO EXPLODE IN FIRING PROCESS
   3 __TO REMOVE WATER FROM THE CLAY BODY______________
   4 __TO FIND AND REMOVE FOREIGN OBJECTS IN CLAY________

3. What is **SLIP**? CLAY SUSPENDED IN WATER   What do we use slip for? SLIP IS USED IN COMBINATION WITH SCORING TO ATTACH SEPERATE PIECES OF CLAY

4. There are several important facts to remember when attaching separate pieces of clay. List THREE very important connecting facts here you need to apply if your projects are going to stay together and not crack or break apart:

   1 BOTH SURFACES NEED TO BE SLIPPED AND SCORED
   2 BOTH SURFACES NEED TO BE PLASTIC CLAY
   3 BOTH SURFACES NEED TO BE PRESSED TOGETHER FIRMLY

5. Can you connect wet clay to dry clay?  Yes   or   No   Why? BECAUSE CLAY SHRINKS AS IT DRIES AND THE WET CLAY WILL SHRINK AWAY FROM THE DRY CLAY THAT HAS ALREADY SHRUNK

6. List and describe 3 changes that occur in our clay as it DRIES...
   CLAY SHRINKS AS IT DRIES (BECAUSE THE WATER IN THE CLAY BODY EVAPORATES)
   CLAY CHANGES IN COLOR
   CLAY BECOMES BRITTLE

7. Clay is called various names to identify what stage the clay is at. When the clay is completely dried out but has NOT been fired it is called   **BONE DRY**

8. When we fire the clay in the KILN the first, lower temperature firing is called the **BISQUE** firing. This process of firing semi-fuses the molecules of clay so it is still porous.
9. The second firing after applying the Glazes is called the Glaze firing. This firing is a (higher or lower) temperature firing. This allows the molecules to completely fuse together and it begins to have more ability to hold water and become a more durable/permanent material for transporting goods.

10. What does the term VITRIFICATION mean? THE CLAY MOLECULES PERMANENTLY BOND TO EACH OTHER MEANING CLAY THAT IS FIRED IS PERMANENT AND CAN NO LONGER BE RECYCLED.

BUILDING AND SURFACES

11. With arrows, identify and label the five major parts of the ANATOMY OF THE POT:

12. What is the bottom of ceramic piece always called? FOOT

13. What is the top of a ceramic piece always called? LIP

14. We have learned many of the traditional ways to make pottery and sculpture. Identify the 3 HANDBUILDING methods being used in each picture:

PINCH  COIL  SLAB
15. What do we call the process of making a form on the Potter’s Wheel? THROWING

16. Match the definition of each decorative treatment to the image below...

a. Stamping
b. Incising
c. Piercing

- Drawing into clay creating a trench-like carving on the surface.
- Removing shapes from clay to reveal areas of negative space.
- Pressing materials (wood tools, beads, fabric, etc) into plastic clay to create an impressed texture.

17. What three tools do you need to roll out a slab of clay? ROLLING PIN, CANVAS, and WOOD RAILS OF EQUAL THICKNESS

18. Why do you use wooden rails/slats when you roll out a slab of clay? TO MAKE SURE YOU GET A SLAB OF EVEN THICKNESS

19. What do you call it when you completely cut out shapes in your clay to reveal negative space? PIERCING

20. What is the process called when we start with a ball of clay and produce a bowl by using only our fingers? PINCH TECHNIQUE

21. What is the process called when we build with small rope like pieces of clay? COIL

22. Work that is thicker than _1_ inch thick must be hollowed out and vented to reduce the chance in exploding.

23. It is also important that your clay pieces are completely DRY before putting them into the kiln. Any MOISTURE will cause the piece to explode.

24. Can the areas where slab pieces meet and fit together be reinforced by adding and knitting a coil on the inside? Yes or no
25. List 3 main reasons for explosions of a clay piece in the kiln:
   1. TOO WET BEFORE FIRING
   2. TOO THICK
   3. AIR BUBBLE OR UNVENTED AIR POCKET

26. Describe what SCULPTURE IN THE ROUND means? SCULPTING AN OBJECT FROM ALL VIEWPOINTS

27. WHAT is NECESSARY TO HAVE while sculpting in the round to help accuracy and addition of details? REFERENCE IMAGES, PHOTOGRAPHS OR THE REAL OBJECT

28. What do you do to your artwork if it begins to get too dry before you are finished building and refining it? SPRAY OR WRAP WITH WET PAPER TOWEL TO RE-HYDRATE OVERNIGHT IN A PLASTIC BAG.

29. What can you do to speed up the drying process in your clay? USE A HAIRDRYER

30. Circle the tools pictured below that are MOST helpful when trying to build a symmetrical coil form?

- [ ] Art History

31. Who is the artist pictured to the right? MARIA MARTINEZ

32. Which handbuilding technique did she work in? COIL

33. Artists have used their ceramic artwork to express their cultural values. True or False

34. Clay has been used by all different cultures throughout history and from all parts of the world. Explain any similarities and differences you have learned about of how these ancient cultures made and used pottery compared to how we do it today. Such as...

   FINDING MATERIALS: PAST MATERIALS DUG UP AND HAND mixed PRESENT CLAY BODY IS ORDERED THROUGH A CATALOG AND EQUIPMENT USED TO MIX AND RECYCLE
   FIRING: PAST WOOD FIRING MONITORED PRESENT ELECTRIC KILN CAN BE PROGRAMMED
   PURPOSE OF POTTERY: PAST: PRIMARILY FUNCTIONAL PIECES USED TO STORE GRAIN, TRANSPORT WATER, PRESENT : MANY EXPRESSIVE NON-FUNCTIONAL CERAMIC ARTISTS HAVE
**FUNCTIONAL CERAMIC**

What makes a piece of functional pottery successful? Above all...the ease in which a functional piece can be used...such as an easy to grab handle, a smooth lip that is not sharp, etc.

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**CLAY TOOLS AND EQUIPMENT**

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### 35. What is the name of the tool pictured in BOX C? FETTLING KNIFE What is it best used for? CUTTING SLABS, PIERCING LARGER SHAPES.

### 36. What is pictured in BOX E? CANVAS Why do we use this in our studio? IT IS USED TO PREVENT WET CLAY FROM STICKING TO THE TABLE WHEN BEING ROLLED OUT INTO A SLAB.

### 37. What is pictured next to letter B? BANDING WHEEL When do we use this in our studio? WHEN TRYING TO RAISE OUR WORK TO EYE LEVEL AND TRYING TO ACHIEVE A SYMMETRICAL FORM.

### 38. The piece of equipment next to letter G mixes and recycles our clay. What is it called? PUG MILL.

### 39. Letter A has a NEEDLE tool pictured next to it. What is this best used for? FOR PRECISE SLIPPING AND SCORING OR PIERCING AREAS OF NEGATIVE SPACE. What should it NOT be used for? IT SHOULD NOT BE USED FOR DRAWING ONTO THE CLAY SURFACE.

### 40. The tool in BOX D is best used for SMOOTHING THE SURFACE OF CLAY. What is it called? METAL SCRAPER.

### 41. The tool in BOX H is used for CUTTING THROUGH A THICK BLOCK OF CLAY OR REMOVING WHEEL WORK FROM THE WHEEL. It is called the WIRE CUT-OFF TOOL.
GLAZING

42 When can you apply glaze to a project? After it has been __BISQUE_____________fired.

43 What is the material in a glaze that makes the clay surface shiny and glass like (this gives it that “ping” sound)? ___SILICA___________________

44 In general, how many coats of glaze should be applied to your piece? ____2________

45 What do you do to the bottom of your glazed piece before you place it on a shelf to be glaze fired? __DRYFOOTING (REMOVING GLAZE FROM THE BOTTOM)_________________

Why is this necessary? _BECAUSE GLAZE TURNS INTO A STICKY LIQUID IN THE KILN WHILE FIRING AND IT WOULD CAUSE THE PIECE TO STICK TO A KILN SHELF_

46 Glaze finishes can be described as:

Gloss, _HIGH SHINE_

Satin, _SOFT SHEEN_

Matte, _DULL SURFACE_

Clear Transparent _SEE-THROUGH CLEAR GLOSS_

Translucent _SEE-THROUGH COLOR_

Opaque, _NON-SEE THROUGH COLOR_

47 What is the difference between a Gloss Glaze appearance and a Matte Glaze appearance? __HIGH SHINE VS DULL SURFACE______________

48 What must you do the glaze buckets before glazing and why? _GLAZE BUCKETS MUST BE MIXED WELL BECAUSE THE MATERIALS IN THE WATER SETTLE WHEN NOT IN USE. TRUE COLOR WILL NOT BE ACHIEVED UNLESS ALL THE PARTICLES BECOME SUSPENDED IN THE WATER_

49 What must you do to your porous bisqueware BEFORE glazing? _REHYDRATE WITH A CLEAN SPONGE_

Why is this necessary? _TO REMOVE DUST AND FINGERPRINTS BEFORE GLAZING THAT WOULD CAUSE GLAZE FAULTS TO OCCUR_

Artistic Questions

WORD BANK: Line, Shape, Form, Space, Color, Texture, Value, Balance, Emphasis/Focal Point, Contrast, Movement, Pattern, Rhythm, Unity/Harmony

50 What are the elements of art? _TEXTURE, SHAPE, VALUE, FORM, LINE, COLOR, SPACE_

51 What are the principles of design? _UNITY/HARMONY, RHYTHM, BALANCE, EMPHASIS/FOCAL POINT, CONTRAST, MOVEMENT, PATTERN_

52 How can you create rhythm or pattern in a clay project? _BY REPEATING A SHAPE OR OBJECT IN A WORK_
53 How can you create an area of emphasis? CONTRAST (BLUE POT WITH A RED FLOWER, WHITE SMOOTH CUP WITH A TEXTURED LIP)

54 What is proportion? HARMONIOUS SIZE OF INDIVIDUAL PARTS TO EACH OTHER OR TO THE WHOLE

55 What do we call the point at which your eye stops or is lead to? THE FOCAL POINT/EMPHASIS

56 What is the difference between Symmetrical and Asymmetrical? WORK THAT IS SYMMETRICAL IS MIRROR IMAGE OPPOSITE A VERTICAL LINE.

57 Positive and Negative areas can be created on your piece to show areas of SPACE

58 When all parts of a piece work together as a whole, we call this UNITY

59 The element used to describe our 3-Dimensional work? FORM

60 The element that refers to the SURFACE QUALITY (visual or tactile) of an object is TEXTURE

61 The element that refers to 2-dimensional objects SHAPE

62 The distribution of visual or physical weight of an artwork BALANCE

63 Use the term ORGANIC or GEOMETRIC to correctly label the images below.
   Organic – rounded, curved, irregular as found in nature
   Geometric – mathematical shapes, such as squares, and circles

64 Match the Picture with the Term that BEST Demonstrates the application of: Asymmetrical Design, Symmetrical Design, and Positive and Negative Space
Matching Section: Match the Elements & Principles that BEST DESCRIBE the DOMINENT DESIGN ELEMENT in the pieces below.

WORD BANK: Line, Shape, Form, Space, Color, Texture, Value, Balance, Emphasis/Focal Point, Contrast, Movement, Pattern, Rhythm, Unity/Harmony

PATTERN
FORM
COLOR

RHYTHM
CONTRAST
SYMMETRY

SPACE
UNITY

EMPHASIS/FOCAL POINT
CONTRAST
THE 4 STEPS OF ART CRITICISM-
This is a four step process that will slow down your reaction and responses to artwork that is more expressive and non-functional.

1. **DESCRIPTION** - Describe what you see using. Keep it neutral and just list the facts, such as the form and the materials. Examples: A Ceramic Bowl, A Painting of a Cow, A Photograph of a Green Pepper, A Copper Necklace, Etc.

2. **ANALYSIS** - This should explain how the artist used the Elements & Principles of Design to visually organize the artwork. Elements- Line, Shape, Color, Form, Texture, Space, Value. Principles- Unity, Balance, Emphasis, Balance, Movement, Rhythm, and Contrast.

3. **INTERPRETATION** - This should explain what is happening in the artwork. What is the artist trying to say? What ideas, sensations, or feelings is the artwork/artist exploring? Is it.............. Trying to shock? Trying to educate/create awareness? Trying to express beauty? Or, one the many, many other possibilities?

Sometimes an artwork is accompanied by an **ARTIST STATEMENT**. This is usually a short paragraph written by the artist that **EXPLAINS THE MEANING OF/BEHIND THE ARTWORK**. See example below

We have stumbled into the 21st Century with the technologies of 'StarWars' and the emotional maturity of cavemen. If we can’t find more creative solutions to solving worldwide social and political problems than sending young men and women to shred and incinerate one another’s flesh with weapons of ever increasing efficiency, we will not survive to celebrate the passage into the 22nd Century -- the problems of human civilization are far too complex to be solved by means of explosive devices. And our country and too many of our world’s nations are now in the hands of right wing thugs and fundamentalist tyrants who are fumbling the planet towards World War III.

I continue to make ceramic sculptures which reflect on the social and political dilemmas of our world. As André Malraux observed, "Art is a revolt against man’s fate".

Need I say more?

4. **JUDGEMENT** - What do you think of the work? Do you like it or not? Why or why not? Here’s your chance to get personal, so tell us what you think!
Practice the four steps with the sculpture above by Adrien Arleo...

Description:

Analysis:

Interpretation:

Judgement:
slip
Clay particles suspended in water. Used for joining separate pieces of clay together.

plastic
Soft malleable clay.

leatherhard
Rigid clay that is best for carving, will not bend without breaking.

Bone dry
All water is evaporated and is ready to be placed in kiln. Lighter in color and very brittle.

Greenware
All of these are UNFIRED CLAY. The water content can be adjusted to your needs and these states can be RECYCLED!

Bisque fire
SLOW FIRE: VITRIFICATION OCCURS...Purposefully fired slowly. Water in the clay body will boil and cause work to burst if fired to quickly...

biskeware
Very POROUS and no longer can be recycled

Bucket Glaze applied

Glazed ware
QUICK FIRE: water content in clay is no longer a concern...Glaze matures on surface of ceramic. Slightly higher temperature

Now is watertight and easily cleaned. Attractive colors.