SAN DIEGO COMMUNITY COLLEGE DISTRICT
CONTINUING EDUCATION
COURSE OUTLINE

SECTION I

SUBJECT AREA AND COURSE NUMBER

ARTX 548

COURSE TITLE

INTRODUCTORY CERAMICS-OA

TYPE COURSE

NON-FEE OLDER ADULT

CATALOG COURSE DESCRIPTION

This course is an introduction to fundamental ceramics skills, designs, and history. There will be hands on experience for the students to practice the ceramic techniques in the design and production of the three basic simple clay forms using various construction methods and glazing techniques. The course includes instruction in safety procedures, proper use and cleanup of hand tools and lab equipment. (FT)

LECTURE/LABORATORY HOURS

72

ADVISORIES

NONE

RECOMMENDED SKILL LEVEL

- Sixth grade reading level and general math level
- Ability to communicate effectively in the English language
- Ability to draw a top and side view of a proposed project

INSTITUTIONAL STUDENT LEARNING OUTCOMES

1. Social Responsibility
   SDCE students demonstrate interpersonal skills by learning and working cooperatively in a diverse environment.
2. Effective Communication
   SDCE students demonstrate effective communication skills.

INSTITUTIONAL STUDENT LEARNING OUTCOMES (CONTINUED)

3. Critical Thinking
   SDCE students critically process information, make decisions, and solve problems independently or cooperatively.
4. Personal and Professional Development
   SDCE students pursue short-term and life-long learning goals, mastering necessary skills and using resource management and self-advocacy skills to cope with changing situations in their lives.

COURSE GOALS

1. To provide students with a basic understanding of the properties of clay.
2. To develop students' problem solving strategies with respect to water's expansion and shrinkage properties.
3. To provide practice in various methods of ceramic construction.
4. To provide instruction in the use of potter's wheel to differentiate between plate, bowl, and cylinder forms.
5. To provide a basic understanding of geologic properties of clay as they relate to specific products, and in glaze composition.
6. To provide an overview of ceramic history.
7. To provide instruction in the 3-D planning of forms to use critical thinking skills to evaluate a form's feasibility.
8. To increase students' understanding of ceramic cultural traditions and diversity to better understand design and functionality in ceramic pieces.
9. To use math and computation skills to plan for shrinkage, and in glaze composition.
10. To provide an understanding of safety procedures when using equipment and performing wet floor clean up.

COURSE OBJECTIVES

1. Demonstrate how to manipulate clay by hand into a workable consistency with plasticity.
2. Construct clay projects using various methods of ceramic construction, including use of a potter's wheel and/or hand building techniques.
3. Demonstrate mastery of joining techniques, including preparing clay slip for use in structural joints.
4. Implement use of proper drying schedules in the finished glaze ware projects.
5. Demonstrate safety procedures when using equipment and performing wet clean up.
6. Explain how the ratio of the height to the width of the centered clay mass changes for cylinder, bowl and plate.
7. Discuss wheel safety and proper attire.
8. Explain the importance of clay properties, preparation and design to the quality of a finished product.
9. Describe general concepts and list the general historical development of ceramics
10. Draw, construct, and document each stage of the ceramic process.
11. Demonstrate use of math skills when making a glaze or slip, and to calculate shrinkage rates.
12. Describe the basic ceramic procedures of firing, glazing, and coloring oxides; and the effects of oxidation and reduction firing atmospheres on them.

SECTION II

COURSE CONTENT AND SCOPE

MODULE I
SAFETY AND ORIENTATION

1. Ceramics Lab Facility Orientation
    1.1. Fire extinguishers
    1.2. Evacuation plan
    1.3. First Aid materials location
    1.4. Material safety data sheets (MSDS) binder location
    1.5. Traffic flow; flow of greenware, bisqued ware, and glazed ware
    1.6. Production restrictions
    1.7. Appropriate content
    1.8. Relaxed, safe, cooperative learning environment in laboratory
    1.9. Discovery of personal aesthetic, consistent with the nature and properties of ceramic materials and procedures
2. Safe Work Practices
    2.1. Ceramics lab safety video
    2.2. Protective equipment
    2.3. Clothing
    2.4. Jewelry
    2.5. Hair (especially at the potter's wheel)
    2.6. Shoes
3. Housekeeping/Cleanliness
    3.1. Do's and don'ts in sink use and clay recycling bins
    3.2. Glaze room clean up procedures
    3.3. Wet cleanup of work stations before moving to next work station, tabletops and floor surfaces, and proper waste water disposal
    3.4. Water spills on the floor
    3.5. Potter's wheels and area clean up
    3.6. Fire danger and the kiln
    3.7. Injury prevention
    3.8. Equipment damage prevention
4. Tool and Equipment Safety
    4.1. Hand
    4.2. Electric
    4.3. Gas and electric kilns
    4.4. Slab roller and extruder
    4.5. Drying oven

MODULE II
THE NATURE OF CLAY

1. The Nature of Clay
    1.1. Wedging to remove air pockets

COURSE CONTENT AND SCOPE (CONTINUED)

1.2. Wedging to get even water distribution
1.3. Wedging to recycle scraps that are too dry/too wet
1.4. Wedge porcelain on wood surface only to retain plasticity
1.5. Wedge stoneware on plaster or wood surface
1.6. Geologic processes and clay formation, particle attributes of primary and secondary clay
1.7. Types of clay bodies, matching types to special needs (wheel, sculpture, tiles, etc.)
1.8. Compression in the 3-hand building methods, and wheel throwing as it relates to crack prevention
1.9. Strength factors: compression, and 3-D curved forms in space
1.10. Cracking as related to drying, removal of support before shrinking occurs; and wall thickness variation, texture depth
1.11. Structural slip preparation for joints or additions

2. Hand Building Methods of Construction
   2.1. Slab preparation
      2.1.1. Use of rolling pin or slab roller
      2.1.2. Pulling a slab
      2.1.3. Compression and alignment of clay particles for bonding during bisque and high firings
   2.2. Use of a support and release, issues of shrinkage and concave and convex supports and schedules for removal to prevent cracking
   2.3. Coil preparation and moisture control
      2.3.1. Even wall thickness and drying schedules to prevent cracking
   2.4. Pinch method
      2.4.1. Rule of ratio of height to width, and additions schedule to prevent collapsing
   2.5 Hand exercises to increase grip strength and dexterity
   2.6 Introduction to the three basic forms: cylinder, bowl or cone, and plate or disc
   2.7 Proper use of slip,
      2.7.1 Matching degree of hydration to clay body state of dryness

MODULE III
THE POTTER'S WHEEL

1. Stages of Development
   1.1. Centering
   1.2. Opening
   1.3. Establish the floor (curved or flat)
   1.4. Compression of the floor
   1.5. Set up step for cylinder, bowl, or plate
   1.6. Pulling the wall
   1.7. Ribbing; cut off base
   1.8. Slice floor from wheel head
   1.9. Removal from wheel head
   1.10. Partial drying off-wheel
   1.11. Trimming, and making and attaching handles
2. Planning for Wheel Throwing
   2.1. Centering ratios for the cylinder form, execution of a cylinder

COURSE CONTENT AND SCOPE (CONTINUED)

2.2. Centering ratios for the bowl form, execution of a bowl or cone form
2.3. Centering ratios for the plate form, execution of a plate or disc form
2.4. Use of bats on the wheel for throwing
2.5. Tool layout
2.6. Water use
2.6.1. Timing, bracing, and pressure control in the hands

3. Finishing the Wheel Thrown Project
3.1. Trimming a flat floored project vs. a curved floor project
3.2. Use of bats on the wheel, for trimming
3.3. Tool layout
3.4. Timing, bracing, and pressure control in the hands
3.5. Making handles and slip and scoring attachment to project, drying schedules
3.6. Posture and exercises for the wheel

MODULE IV
GEOLOGIC PROCESSES AND CLAY BODY TYPES, AND GLAZE COMPONENTS

1. Clay Formation and Structure
1.1. Primary and secondary clay, plasticity characteristics, grog size, and shrinkage rates of stoneware vs. porcelain vs. sculpture clay bodies
2. Application to Function and Prevention of Cracking
2.1. Matching certain clay body types to specific uses
2.2. Clay wall thickness consistency as related to shrinking and cracking
2.3. Depth of texture as related to shrinking and cracking
2.4. How compression relates to clay alignment in the 3-hand building methods, and the wheel
2.5. Causes of cracking in the 3-hand building methods, the wheel, and in sculpture
3. Glaze Components
3.1. Components in a glaze
3.2. Matching the component to the function in a glaze
3.3. Mixing batch glazes and colored slips from recipes (then sieve)
3.4. Introduction to the CONE system, and corresponding temperatures
3.5. Characteristics of high-fire glazed wares vs. low-fire glazed wares, raku procedures
3.6. Introduction to the differences between and uses of glaze types, match to functional uses
3.7. Glaze surface qualities (gloss, semi-gloss, matte, and semi-matte), match to uses
3.8. Glaze depth qualities (transparent, translucent, and opaque), match to functional uses
3.9. The effects of placement of glazed ware in the kiln with regard to oxidation and reduction firing atmospheres on glaze melting characteristics and color development of clay body/glaze
3.10. Stages the clay project goes through, from beginning to end, from the point of view of the CONE system, firing ranges/temperatures
3.11. The glaze plan

COURSE CONTENT AND SCOPE (CONTINUED)

MODULE V
CERAMIC HISTORY, CERAMIC TRADITIONS, FUNCTIONAL POTTERY DESIGNS, AND DECORATIVE MOTIFS

1. General Ceramic History
   - 1.1. Introduction to a survey of cultural contributions in ceramics: table vs non-table cultures
   - 1.2. Time periods in ceramic history
   - 1.3. Design motifs (banding patterns), textures motifs, make own stamp patterns to press into wet clay, draw onto bisqued surface, or paint over glazed surface with oxides
2. Ceramic Traditions: Form vs. Function
   - 2.1. Beverages
   - 2.2. Cooking pieces
   - 2.3. Dinnerware
3. Decorative Motifs (as appropriate to functional surfaces)
   - 3.1. Research a rim treatment, foot treatment, background or foreground pattern
   - 3.2. Graphic design
   - 3.3. Relief decoration bas-relief (additive)
   - 3.4. Relief decoration incised (subtractive)

APPROPRIATE READINGS

Instructor prepared materials, instructor selected websites, and/or materials related to the production of functional and/or artistic ceramic pieces. A list of reading references will be provided by the instructor.

WRITING ASSIGNMENTS

1. Keep detailed weekly entries in a Ceramics Notebook, to include: lecture notes, 3-D plan drawings for proposed projects, glaze plans, record use of clay body type, colored slips, glazes, oxides, cone firing specification, and oxidation or reduction atmosphere choice; library research notes.
2. Write a book report, magazine review, or a critique of a video or Internet website related to the production of ceramic pieces or to a specific topic covered in this course.

OUTSIDE ASSIGNMENTS

Visit a gallery, museum, ceramist's studio, or craft fair, to see and feel hand-made ceramic pieces; interview an artist about ceramic styles, techniques and finishes. Write a report or critique about the visit, explaining how this new knowledge influences work.

APPROPRIATE ASSIGNMENTS THAT DEMONSTRATE CRITICAL THINKING

Assignments which demonstrate critical thinking include identifying a use and function of a ceramic project, and evaluating the piece in respect to past ceramic traditions; reporting verbally during classroom discussions on function and sculptural aesthetics, strengths and weaknesses; evaluating and documenting use of a finished product for the purpose for which it was created, and identify possible improvements.

EVALUATION

1. Perform the manipulative skills of the craft while being observed by the instructor:
2. Pass the cut-off wire test to the standard of zero air pockets.
3. Apply theory to laboratory assignments as tested orally over basic ceramic procedures, firing, and glazing.
4. Perform on written, oral, or practical examinations.
5. Contribute to class discussions and group critiques.
6. Maintain attendance per current policy.

Satisfactory completion of the course requires completion of a ceramic project or instructor selected activity.

METHOD OF INSTRUCTION

Methods of instruction may include but is not limited to lectures, laboratory, presentations, class discussion, individualized study, field trips, and guest speakers. This course, or sections of this course, may be offered through distance education.

TEXTS AND SUPPLIES

1. *Functional Potter: Form And Aesthetic In Pots Of Purpose*, Robin Hopper, The American Ceramic Society, current edition
2. *The Ceramic Spectrum*, Robin Hopper, The American Ceramic Society, current edition
3. *The Craft And Art Of Clay*, Susan Peterson, The Overlook Press, current edition
4. *Pottery Form*, Daniel Rhodes, Dover Publications, current edition
5. *Contemporary Porcelain: Materials, Technique And Expressions*, Peter Lane, A & C Black, current edition

Online Resources:

Gettyimages.com
Ceramicsartdaily.org
Pintrest.com

The instructor will supply written materials and a list of resources for personal hand tools.

PREPARED BY: Voelkel DATE 1981

REVISED BY: Hill DATE June, 1982

REVISED BY: Kozminska DATE August 11, 1997

REVISED BY Instructional Services/SLO's Added DATE May 7, 2015

REVISED BY: Pamela Kozminska DATE: March 24, 2016

REVISED BY: David Cox, Pamela Kozminska, Pat Mosteller, Patty Yockey DATE: May 2, 2018

Instructors must meet all requirements stated in Policy 3100 (Student Rights, Responsibilities and Administrative Due Process), and the Attendance Policy set forth in the Continuing Education Catalog.

REFERENCES:

San Diego Community College District Policy 3100
California Community Colleges, Title 5, Section 55002
Continuing Education Catalog