A mastery of skills in creative ceramic arts is recommended for students in grades 9 through 12 before they attempt this quinmester course. Emphasis is upon students acquiring an understanding of the historical development of ceramics enabling them to identify outstanding ceramics of the past; basic kinds of ceramic art and ceramists from various countries; and several outstanding contemporary American ceramists. Other objectives are for students to master a working knowledge of clay preparation and handling, clay forming, decorating, glazing, and firing. The format, in outline form, includes information on rationale, guidelines, objectives, course content, suggestions for setting up criteria for evaluation, and pupil resources. Related documents are SO 005 207, SO 005 269, SO 005 273, and ED 061 232. (SJM)
AUTHORIZED COURSES OF STUDY FOR THE QUINMESTER PROGRAM

ART EDUCATION
Creative Ceramic Design
6688.01

DIVISION OF INSTRUCTION • BULLETIN 1Q • JANUARY 1972
CREATIVE CERAMIC DESIGN
(Tentative Course Outline)

6688.01

ART EDUCATION

Written by: Louis M. Marinaccio

for the

DIVISION OF INSTRUCTION
Dade County Public Schools
Miami, Florida
1971
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I. COURSE TITLE
CREATIVE CERAMIC DESIGN

II. COURSE NUMBER
6688.01

III. COURSE DESCRIPTION
An opportunity for the student to develop further skill in forming larger and more complex hand-built pots requiring building in sections and combining.

Mastery of skills described in Creative Ceramic Arts is recommended.

IV. RATIONAL:
Ceramic and pottery arts have occupied an important place in man's life from the Neolithic period until the present time. Objects made from clay are durable, functional, and esthetically pleasing. The contemporary application of ceramic clays are as diversified as any material which is used creatively.
V. COURSE ENROLLMENT GUIDELINES
   A. Pre-vocational
   B. Recommended for grades 9-12
   C. Prerequisite: Creative Ceramic Arts

VI. COURSE OF STUDY OBJECTIVES
Competencies expected of the student upon completion of the behavioral objectives of this course in writing or orally:

A. Definition and background
   The student will be able to:
   1. Identify outstanding ceramics of the past.
   2. Display a knowledge of the basic kinds of ceramic art and ceramists from England, Holland, Belgium, Italy, Germany, Denmark, Sweeden, Finland, Norway, and Japan.
   3. List several outstanding contemporary American ceramists.

B. Clay preparation and handling:
   The student will be able to:
   1. Differentiate between residual and sedimentary clays.
   2. List several types of clay.

C. Clay forming
   The student will be able to:

2. Demonstrate the method of forming several types of lids for covered jars and urns.

3. Identify the necessary tools used to work in ceramics.

4. Identify the work of several outstanding ceramists from the Ceramic League of Miami.

D. **Decorating**

The student will be able to:

1. Demonstrate techniques of decoration that enhance and fit the form.

2. Exhibit a working knowledge of decorative techniques as employed by contemporary American ceramists.

E. **Glazing**

1. Explore and analyze glaze results.

2. Exhibit a working of glaze texture through analysis of works of contemporary ceramists.

F. **Firing ceramic wares**

1. Demonstrate the proper procedure for stacking the kiln for bisque and glaze firing.

2. Identify and analyze firing defects due
to poor construction, underfiring, and overfiring of ceramic ware.

VII. COURSE CONTENT

A. Definition and background

1. Historical

   a. Prehistoric
   b. Egyptian
   c. Ancient Near East
   d. Asia
      (1) India
      (2) China
      (3) Korea
      (4) Japan
   e. Classical
      (1) Crete
      (2) Greece
      (3) Etrusca
      (4) Rome
   f. Byzantium (Rome)
   g. Islam
   h. Pre-Columbian
   i. Renaissance in Europe

2. Contemporary European and Japanese ceramists

   a. England
      (1) Bernard Leach
(2) Lucie Rie
(3) Michael Cardew
(4) Katherine Pleydell-Bouverie
(5) Murray Fieldhouse
(6) Janet Leach
(7) Kenneth Clarke
(8) James Tower
(9) David Ballantyne
(10) Bryan Newman
(11) Ian Auld
(12) Rosemary Wren
(13) Waistrel Cooper

b. Holland
(1) Adrick Westenink
(2) Susanne Taub
(3) Lies Cosyn
(4) Sonja Landweer
(5) Jan de Rooden
(6) Maryke van Vbaardinger
(7) Hans de Jong
(8) Johnny Rolf
(9) Jan van der Vaart

c. Belgium
(1) Pierre Caille

d. Italy
(1) Guido Gambone
(2) Salvatore Meli
(3) Gian Baltista Valentini
(4) Carlo Zauli
(5) Nino Caruso
(6) Leoncillo
(7) Germano
(8) Alda Ajo
(9) Enrico Casmassi

e. Germany

(1) Karl Scheid
(2) Hubert Greimert
(3) Klaus Schultze
(4) Walter Popp
  i) Heiner Balzar
(6) Ursula Scheid
(7) Heinz H. Engler
(8) Hildegard Storr-Britz

f. Denmark

(1) Kristen Weeke
(2) Helle Allpass
(3) Finn Lynggard
(4) Eva Staehr Nielsen
(5) Lisa Engquist
(6) Gutte Erickensen
(7) Niels Refsgaard
(8) Conny Walther
g. Sweden

(1) Stig Lindberg
(2) Carl-Harry Stalhane
(3) Marianne Westman
(4) Sylvia Leuchovius
(5) Hertha Bengston
(6) Karin Bjorquist
(7) Britt Louise Sundell-Nemes
(8) Tom Moller
(9) Gert Moller
(10) Hertha Hillfon
(11) Wilhelm Kage
(12) Gunilla Palmstierna

h. Finland

(1) Francesca Lindh
(2) Anja Jaatinen
(3) Liisa Hallamaa
(4) Birger Kaipiainen
(5) Toini Muona
(6) Kay Franck
(7) Marjukka Paasivirta
(8) Kyllikki Salmenhaara

i. Norway

(1) Rolf Hansen
(2) Richard Dubourgh
Erik Ploen
J. Japan
(1) Guzo Kamiquchi
(2) Toyoza Arokaua
(3) Shoji Hamada
(4) Kenkichi Tomimato
(5) Kitaoji Rosanjin
(6) Mineo Kato
(7) Kanjiro Kawai
(8) Osamu Suzuki
(9) Totaro Sakuma
(10) Skimaoka Tatsuzo
(11) Yoshimichi Fujimato
(12) Kazuo Yagi

3. Contemporary American Ceramists
   a. Sheldon Carey
   b. Gertrud Natzler
   c. Otto Natzler
   d. Carlton Ball
   e. Peter Voulkos
   f. Paul Soldner
   g. Theodore Randall
   h. Karl Martz
   i. Robert Turner
   j. Lyle Perkins
   k. Marquerite Wildenhain
1. Antonio Prieto
2. Daniel Rhodes
3. Herbert Sanders
4. Warren MacKenzie

4. American Indian

B. Clay preparation and handling

1. Methods of preparing and handling clay.
   a. Wedging
   b. Kneading
   c. Conditioning
   d. Storing

2. Classification of clays
   a. Primary or residual clay
   b. Secondary or sedimentary clay

3. Types of clay
   a. Earthenware clays
   b. Stoneware clays
   c. Fire clays
   d. Ball clays
   e. Porcelain clays

4. Equipment and tools
   a. Wedging boards with cutting wire and canvas
   b. Pug mill
   c. Large heavy duty cans and crocks.
d. Plaster and setstone bats

e. Large natural sponges

f. Flexible rubbers

C. Clay forming

1. Advanced methods in forming hand-built pottery.
   a. Pinch
   b. Coil
   c. Slab
   d. Drape
   e. Combined methods

2. Forming larger and more complex hand-built pottery.


4. Forming with a large quantity of clay.

5. Forming stacked hand-built pottery.

6. Forming and attaching several medium and large sized spouts.

7. Forming lids for covered jars and urns.
   a. Flat-inset
   b. Curved-inset
   c. Flanged
   d. Recessed-knob
   e. Rose-jar
8. Welding two or more large sections together.

   a. Vases
   b. Pitchers
   c. Bottles
   d. Teapots
   e. Covered jars
   f. Covered urns
   g. Cups and saucers
   h. Lugged bowls
   i. Double-wall pots
   j. Casserole dish with lid
   k. Plates
   l. Closed forms
   m. Sectional forms
   n. Free forms
   o. Open forms
   p. Sectional forms
   q. Hanging forms

10. Constructing four forms in such a manner that they can be stacked or used as separate pots.

11. Constructing free-standing forms with slabs of clay.

13. Equipment and tools
   a. Plaster or setstone bats
   b. Large natural sponges
   c. Dampbox
   d. Polyethylene plastic bags
   e. Aluminum modeling, decorating wheel - 8, 10, 12, 14-inch head.
   f. Boxwood modeling tools 6-inch length
   g. Boxwood wire modeling tools - 8 inches
   h. Fettling and potter’s knives
   i. Flexible scrapers - 2” x 4” half moon
   j. Finishing rubbers 2-1/8” x 3-1/2”
   k. Metal dividers or compass
   l. Metal or wooden calipers
   m. Metal turning loop tools
   n. Sgraffito tools

14. Ceramic League of Miami-Resource People
    Virginia L. Davis    Edmund O. Weyhe
    Chili Emerman        Barbara Garrett
    Geri Popenoe         Marilyn Sherwood
    Lynn Glatstein       Natalie B. Linder
    Janel Lund           Juanita May
    Genevieve McCrea     Marie Furman
    Mary Grabill         Elinor Jensen
D. Decorating

1. Methods of decorating
   a. Incising
   b. Sgraffito
   c. Carving
   d. Embossing
   e. Stamping
   f. Texturing
   g. Stenciling
   h. Wax resist
   i. Mishima
   j. Satsuma
   k. Slip painting
   l. Slip trailing
   m. Spraying
   n. Terra sigillata
   o. Impressing
   p. Applique
   q. Sprigging
   r. Excising
   s. Slips and engobes
   t. Inlay
   u. Underglazes
   v. Underglaze crayons
   w. Rubber resist
   x. Semi-matt
   y. Overglazes
   z. Matt
2. Materials for decorating
   a. Tools
      (1) Decorating wheel
      (2) Slip trailers
      (3) Plastic bags
      (4) Large round or flat brushes for glaze and slip application
      (5) Bamboo brushes, large and medium for wax resist and other use
      (6) Small pointed brushes for detail
      (7) Flexible scraper, half-moon shape
      (8) Steel plaster and clay modeling tools for sgraffito, blending, incising, scraping, etc.
      (9) Elephant ear sponge
      (10) Professional boxwood tool
      (11) Steel loop modeling tool
      (12) Fettling knife
      (13) Pencils and india ink
      (14) Plastic water container
   b. Consumable materials
      (1) Slip
      (2) Plaster of paris
      (3) Engobes
      (4) Stencil paper
(5) Wax resist
(6) Rubber resist
(7) Underglaze
(8) Overglaze
(9) Gloss
(10) Semi-matt
(11) Matt

E. Glazing

1. Methods of glazing
   a. Dipping
   b. Pouring
   c. Brushing
   d. Spraying

2. Equipment and tools
   a. Glazing bowl
   b. Pitcher
   c. Two sticks
   d. Mesh metal sieve
   e. Metal glaze tong
   f. Glaze brushes -- soft hair, flat 1/2" to 1"
   g. Ceramic spray booth with exhaust fan, stand, and filter
   h. Sprayer outfit with gun-compressor
   i. 120 mesh sieve

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3. Types of glazes
   a. Low-temperature glazes
      (1) Alkaline glazes
      (2) Lead glazes
   b. Middle-temperature glazes
      (Bristol glazes)
   c. High-fired glazes
      (1) Stoneware glazes
      (2) Porcelain glazes

4. Glaze textures
   a. Transparent
   b. Opaque
   c. Gloss
   d. Matt

5. Glaze defects
   a. Defects due to clay body
      (1) Pinholes and bubbles
      (2) Sandpaper surface
      (3) Blistering
   b. Defects due to application
      (1) Blisters and pinholes
      (2) Scaly surface
      (3) Running
      (4) Chipping
      (5) Dryness
(6) Cracking
(7) Bubbles and blisters
c. Defects in glaze composition
   (1) Shivering
   (2) Crazing
   (3) Dull surface on gloss glaze
   (4) Crawling
   (5) Pinholes and bubbles

F. Fitting ceramic ware
   1. Preparing ware for firing
      a. Drying
         (1) Storing (drying cabinet)
         (2) Bone dry
   2. Procedure for firing kiln
      a. Familiarizing with kiln manual
      b. Applying kiln wash
      c. Stacking kiln for bisque firing
      d. Stacking kiln for glaze firing
      e. Measuring and managing kiln temperature
         (1) Cones
         (2) Pyrometer
      f. Following firing schedule
      g. Following cooling schedule
      h. Removing ware from kiln
   3. Defects due to improper firing
      a. Shattering
b. Cracking
c. Warping
d. Blistering
e. Pinholing
f. Glaze crawling
g. Melting
h. Crazing

VIII. EVALUATION

It is essential to establish a criteria for evaluating the progress of the student in an art experience. Evaluation in ceramic art cannot be rigid to the extent that it will inhibit creative expression. Creativity is unique and personal.

The product itself cannot be evaluated without taking into consideration the process the student experienced from inception to completion. In addition, evaluation must include evidence of the growth of the individual in relation to his attitude, interest, ability to complete a project, how well he can use his past experience toward problem solving, respect for his own ability and the rights of others.

Evaluation is of vital importance to the student's development. It helps to determine the growth of
the student so that the teacher can further motivate and guide the student toward his fullest self-development, creativity and aesthetic growth.

The criteria established for evaluation will vary due to individual differences among students and teachers. Each teacher must determine his own goals and formulate standards for evaluation always keeping in mind that evaluation must be positive as well as constructive.

The following are some suggestions in setting up criteria for evaluation:

1. Has the student learned to evaluate his own pottery as well as that of others with consideration to the sensuous quality of the clay, form, and content?
2. Has the student designed the entire object with an awareness of space, form, movement, order, relationship of parts to the whole, and good color organization?
3. Has the student expressed his ideas creatively in the medium in an original and meaningful way?
4. Has the student developed a sensitivity to the material?
5. Does the student express his ideas and individuality in clay?
6. Has the student become aware that texture results from an interaction of the clay and the tools?
7. Is the student aware of the difference between tactile and visual textures?
8. Has the student become sensitive to the expressive qualities of the different clay materials and tools?
9. Is the student aware that improper use of material and tools results in poorly constructed forms?
10. Is the student aware that variety can add interest to forms but too much can destroy it?
11. Does the student react empathically to clay in terms of three-dimensional forms?
12. Is the student familiar with good ceramic art of the past and present?
13. Is the student able to identify from contemporary ceramists the ways in which the craftsmen manipulate their tools and materials?
14. Has the student developed good work habits?
15. Has the student's behavior outside the art class improved as a result of his art experience?
16. Has the student developed a respect for his personal ability?
17. Has the student developed a respect for the rights of others?
18. Has the student acquired increased efficiency in handling materials and tools?
19. Has the student developed the ability to carry the project through to completion?
20. Has the student learned the firing process and how to use it to its fullest advantage?
21. Has the student developed good craftsmanship and yet retained the natural qualities of the clay?
22. Has the student learned to form pottery correctly so it does not warp or crack?
23. Is the product suited for the purpose for which it was made?
24. Does it incorporate the principles of good ceramic design?
25. Is the product the one best suited for work in clay?
26. Is the product well constructed?

27. Does the product indicate individuality and expressive quality?

28. Does the glaze fit the form?

29. Has the student improved in attitude, interests, and development of technical skills?
IX. RESOURCES FOR PUPILS

A. Books

General


Prehistoric


Egyptian


Ancient Near East


Asia: (India, China, Korea, and Japan)


Classical: (Crete, Greece, Etrusca, and Rome)


Byzantium: (Rome)


Islam


Pre-Columbian


Renaissance in Europe


B. Suggested periodicals for pupils

Ceramics Monthly
Box 4948
Columbus, Ohio 43212

Craft Horizons
29 West 53rd Street
New York, N. Y. 10019

School Arts
30 Portland Street
Worcester, Mass. 01608

Design Quarterly
1710 Lyndale Avenue
Minneapolis 3, Minn.

C. Suggested places to visit

Grove House School of Art
3496 Main Highway
Coconut Grove, Florida 33133

Sandpiper
2924 Florida Avenue
Coconut Grove, Florida 33133
Village Corner Gallery
1136 South Dixie Highway
Coral Gables, Florida

Lowe Art Museum
1301 Miller Drive
Coral Gables

Miami Art Center
7867 North Kendall Drive
Kendall, Florida

Ceramic League of Miami
7867 North Kendall Drive
Kendall, Florida

Miami Museum of Modern Art
381 N. E. 20th Street
Miami, Florida

Museum of Science-Planetarium
3280 South Miami Avenue
Miami, Florida

Grove House Gallery
3496 Main Highway
Coconut Grove, Florida

Fairchild Tropical Garden
10901 Old Cutler Road
Coral Gables, Florida

Fantastic Gardens
9550 S. W. 67th Avenue
Miami, Florida

Miami Seaquarium
Rickenbacker Causeway
Virginia Key, Florida

Crandon Park Zoo
Key Biscayne, Florida

Scholastic Art Awards Exhibition
Burdin’s Department Store
22 East Flagler Street
Miami, Florida

Miami Studio Shop
2363 West Flagler Street
Miami, Florida

27
Bass Museum of Art
2100 Collins Avenue
Miami Beach, Florida

Japanese Gardens
MacArthur Causeway
Miami, Florida

Viscaya Art Museum
3251 South Miami Avenue
Miami, Florida
X. BIBLIOGRAPHY


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Norton, F. H., *Ceramics for the Artist Potter*, Massachusetts: Addison-Wesley, 1956


