

Ceramics/3D Design

A one semester elective course in the Middle School Art Department.

Developed by:

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Overview/Course Description

Ceramics is an 8th grade elective course. Students will explore slab, pinch and coil hand building techniques. The planning of design, process, function and craftsmanship will be emphasized for construction of product. Self-assessment, individual and group critiques will be based on production criteria and will be written and/or oral with input from the instructor.

Students will experience the creative process from the conception of the idea through its construction.

K-12 Arts Education Content Standards – Michigan Department of Education

Content Standard I	All students will apply skills and knowledge to perform in the arts.
Content Standard II	All students will apply skills and knowledge to create in the arts.
Content Standard III	All students will analyze, describe and evaluate works of art.
Content Standard IV	All students will understand, analyze and describe the arts in their historical, social and cultural contexts.
Content Standard V	All students will understand, analyze and describe connections among the arts; between the arts and other disciplines; between the arts and everyday life.

Units of Study

The three units of study will be presented as a cumulative approach to ceramics. Students will use the ceramic process.

UNIT 1 – Introduction to the Ceramic Process

UNIT II – Construction Methods

UNIT III – Surface and Finishing Techniques

Each unit of study is composed of:

Key Concepts that state the major ideas students are expected to comprehend.

Benchmarks are statements of what students will know or are able to do while progressing towards achieving the standards.

Assessment Tasks are suggestions for ways students can demonstrate the degree to which they have reached the benchmarks.

Opportunities for Integration are connections between concepts with the unit and subject matter from related units or disciplines.

Authentic Application/Career are statements that show where these skills and processes are used in the world beyond school.

Instructional Resources are listed materials that support the teaching of this unit.

Unit I – The Ceramic Process

Key Concepts

1. Clay is a malleable raw material of the earth that has been used by cultures around the world since the beginning of civilization.
2. The location from where the clay was found determines the type, color, consistency and impurities
3. Clay is mixed thoroughly with specific fillers to create the texture and body necessary for construction

Benchmarks

The students will...

1. Demonstrate the proper use of terminology to effectively communicate ideas. (ART.II.VA.MS.1)
2. Demonstrate safe and effective use of tools and equipment. (ART.II.VA.MS.2)
3. Apply the correct working sequence of building, drying, and firing clay. (ART.II.VA.MS.3)

Assessment Tasks

The students will...

1. Demonstrate an understanding of the process of ceramics through the successful completion of work using a variety of building techniques, such as designing and finishing a slab container according to given criteria.
2. Produce artwork that reflects the correct use of tools and equipment, such as using a rib to smooth the surface of the clay.
3. Reflect upon personal artwork using appropriate terminology, such as participating in a critique.

Integration

1. Social Studies: Students will recognize the historical and cultural use of pottery.
2. Language Arts: Students will use terminology specific to the field in relation to everyday objects.
3. Science: Chemical changes occur in clay between the greenware and bisque fired states.

Authentic Application

Students will be able to recognize the use of functional/non-functional fine art pottery in everyday life.
Students will be able to distinguish between hand made and commercially produced ceramics.

Unit II – Construction Methods

Key Concepts

1. Clay in the unfired state when dry is referred to as greenware and when fired becomes bisqueware
2. Clay is formed into shapes with the use of hands, clay tools, and found objects.

Benchmarks

The students will...

1. Apply materials, techniques and processes with sufficient skill, so interpretations are carried out in artwork. (ART. IV.VA.MS.3 and ART. II. VA.MS.1)
2. Create artwork that uses organizational principles using specific building techniques in clay. (ART.II.VA.MS.2)
3. Adapt subjects and creative ideas while using the skills gained to communicate personal interpretations of artwork that demonstrates thoughtfulness and visual coherence. (ART.II.VA.MS.3 and ART.II.VA.MS.4)

Assessment Tasks

The students will...

1. Use various construction methods, including hand building and sculpting according to specific criteria.
2. Communicate ideas with skill, confidence, and sensitivity using a variety of materials, techniques, and processes, such as pulling a handle to attach to a leather hard cylinder previously constructed from slabs.
3. Produce artwork that solves design problems using specific building techniques appropriately, such as creating an architectural piece with slabs.
4. Explore design concepts by investigating visual resources such as Ceramics Monthly according to specific criteria.
5. Reflect upon successful use of techniques to express personal vision through discussions with the instructor.

Integration

1. Social Studies: The historical and cultural uses of pottery are common themes.
2. Technology: The Internet may be used to gather research.
3. Math: Design patterns, calculations, and measurements are used in construction.
4. Architecture: Communicate an understanding of building techniques in structures.
5. Science: Investigate the chemical compounds and molecular structure of clay and glazes

Authentic Application

Students will be able to identify a variety of ceramic building techniques used in fine arts, crafts, and daily life.

Unit III – Surface and Finishing Techniques

Key Concepts:

1. The surface treatment adds interest and significance to the piece.
2. The finish used determines the function of how it is used

Benchmarks:

The students will...

1. Apply materials, techniques and processes with sufficient skill, so interpretations are carried out in clay. (ART.IV.VA.MS.3 and ART.II.VA.MS.1)
2. Create artwork that uses intentional techniques to manipulate the surface of the clay. (ART.I.VA.MS.1)
3. Apply skills and knowledge of color to communicate ideas. (ART.I.VA.MS.I)
4. Experiment with a variety of clay colorant techniques. (ART.I.VA.MS.I)

Assessment Tasks:

The students will...

1. Evaluate the effectiveness of personal vision in a finished piece by participating in critiques.
2. Demonstrate an understanding of surface decoration through the successful completion of work using a variety of texture and colorant techniques, such as painting a bisqued piece with glaze.
3. Produce artwork that reflects intentional manipulation of the surface of the clay, such as burnishing a piece of greenware with a spoon.

Integration:

1. Fine Arts: Recognize pattern and texture in other arts.
2. Science: Explore the chemical composition of glaze materials and chemical changes that occur in the kiln.
3. Psychology: Make connections between color and emotion.

Authentic Application

1. Students will be able to identify that there is texture in the natural and manufactured world.
2. Students will be able to recognize that surface decoration plays a role in personal choices.

Instructional Resources

Recommended Text:

The Potter's Guide to Ceramic Surfaces by Jo Connell

Resources may include:

- The Spirit of Clay by Robert Piepenburg-Pebble Press
- Ceramics periodicals
- Art web sites
- Examples of student and professional artists' work
- Videos
- Field trips to galleries, museums, and art studios

CAREER PATHWAYS

Career Pathways are careers that are grouped together because many of the people in them share similar interests and strengths. All pathways include a variety of occupations that require different levels of education and training. Selecting a Career Pathway provides a *focus* into which one can begin directing energies and determining a *tentative* career "fit " though it is always acceptable to change one's mind. By identifying with a pathway students are aided in selecting courses, extra-curricular activities and part-time employment. Career Pathways provide a plan for all students regardless of their interests, abilities, talents, or desired levels of education. *All pathways have equal dignity.* The following six (6) Career Pathways have been developed by the state of Michigan:

Arts and Communications - careers related to humanities and the performing, visual, literary and media arts.

Business, Management, Marketing & Technology - careers related to all aspects of business including accounting, business administration, finance, information processing and marketing.

Engineering, Manufacturing and Industrial Technology - careers related to technologies necessary to design, develop, install or maintain physical systems.

Health Sciences - careers related to the promotion of health as well as the treatment of injuries and disease.

Human Services - careers in child care, civil service, education, hospitality and the social services.

Natural Resources and Agriscience - careers related to natural resources, agriculture and the environment.



The accompanying *ART curriculum* falls within the **ARTS AND COMMUNICATIONS Pathway**. Some personal characteristics* of people in this pathway are that they:

- ◆ seek opportunities for self-expression;
- ◆ Exhibit an imaginative and creative thinker;
- ◆ demonstrate good writing skills; and
- ◆ Posses strong communication skills.

Examples of additional careers* that fall under this **pathway** include:

Advertising Agent	Interior Designer	Actor/Actress
Broadcast Technician	Clergy	Author
Photographer	Audiovisual Technician	Technical Illustrator
Public Relations Specialist	Photo Process Worker	Bookbinder
Painter and Sculptor	Merchandise Displayer	Dancer
Musician and Composer	Religious Worker	Broadcast Technician
Set Decorator	Radio and Television Announcer	Archivist & Curator
Advertising Copywriter	Historian	Commercial Artist

* Taken from MOIScripts, Michigan Occupational Information System, © 2000

