

VISUAL ARTS - 3D ART G7-8



Ewing Public Schools
2099 Pennington Road
Ewing, NJ 08618

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In accordance with The Ewing Public Schools' Policy 2230, Course Guides, this curriculum has been reviewed and found to be in compliance with all policies and all affirmative action criteria.

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Course Description and Rationale

Three Dimensional Art, or 3D Art, defines works that consider multiple sides of display and active participation of the viewer as they seek more information from each piece. Creating in 3D allows the artist to take into account the possibilities of texture, scale, and space as their audiences may need to physically move or feel their artwork in order to experience the full meaning. Students in 3D art will discover and develop within the traditional 3D art media such as clay, wood, metal, plaster; and techniques such as reductive sculpting, casting, and construction.

This course is designed for beginner students at the 7th grade level, and students seeking to build on previous skills at the 8th grade level, and will be taught using a project-driven approach with student voice and choice as a priority. The media used to enhance students' knowledge of three dimensional art making will include the tools that are commonly used in the art making industry, but also ask students to consider what the future of art making will look like as new developments are made.

With the transformation of two-dimensional shapes into three-dimensional forms at the center of instruction, students will gain an understanding of how to apply media in the creation of art elements in a way that clearly communicates their message. Students will also be introduced to different styles of art and art historical movements to determine how the innovations of 3D creators have molded not only the art world, but the fields of science, medicine, and technology.

3D Art is designed as a semester-long studio course that will be taught every other day for a total of 45 days. Each class period will be 42 minutes long; each project will be approximately between 2-3 weeks in duration with a total of 9 classes to complete any given project.

Through this course, students will gain practical knowledge of the artistic design process and utilize techniques of thumbnail sketches, project proposals, project revisions, and art critique. Time for project ideation will be assigned for one class period at the beginning of each unit, with opportunities for students to preview concepts in advance in order to develop their ideas further.

Unit 1: Transforming Two-Dimensional Shapes into Three-Dimensional Forms

Why is this Unit Important?

In order to experience success in 3D construction, students will need to learn to consider all sides of their artwork; beyond the front and back surfaces. Typically, two dimensional works such as drawings and paintings are regarded first when discussing art at the middle school level, creating a challenge for students fabricating a multi-sided structure for the first time. This unit will guide students through the process of creating templates for forms, applying measurement methods, and rendering sketches appropriate for a multi-sided work of art.

Enduring Understandings

- Form refers to the shape and structure of an assembled material in art.
- All common three-dimensional forms can be created by arranging and connecting two-dimensional shapes.
- Common geometric forms are spheres, cubes, cones, and prisms.
- Culture, including sexuality, disability, ethnicity and language, have a strong impact on the media as well as the subject matter for artists.

Essential Questions

- Can the students identify which template corresponds with a given form?
- Can the students effectively measure the materials needed to transform a two-dimensional sketch into a three-dimensional rendering?
- Can the students create a two-dimensional template that successfully transforms into a technically strong three-dimensional form?

Acquired Knowledge

- Application of surface area and volume measurement formulas
- Translation of circle to sphere, square to cube, rectangle to prism, and triangle to pyramid and cone

Acquired Skills

- Identify the two-dimensional shapes that were necessary in constructing more complex three-dimensional works by contemporary and historically recognized artists.
- Depict a multi-sided form through a series of two-dimensional sketches.
- Create a three-dimensional design that includes continuous elements on all sides

Assessments

Formative Assessments:

- Do Now/Draw Now responses and sketches: find and draw an item in the art room that is a (sphere, cube, cone/pyramid), list as many items as you can that are a cube, cone, or sphere.
- Think/Pair Share Group Discussions: Do you think there are more 2D or 3D works of art in the world? Why?
- Shape to Form Skill builder: students will create paper templates that are able to be assembled into common forms using a single piece of tape.

Summative Assessment

- Project: Creation of a faux product to be displayed in a "pop up shop" installation. Students will create and use a template to create a sculpture of an item that could be purchased at a local store with accurate scale and dimensions.

Benchmark Assessment

- Students will respond through an Artist Statement about the measurements and materials in creating their faux product for the class shop and the process of recreating an item with specific dimensions.

Alternative

- Students will create a display to be used to showcase a selection of products created by classmates.
- Students will use a scale formula to create a miniature rendition of an existing product with accurate dimensions.

Core Instructional Materials

- [National Gallery of Art, Lessons and Resources for Grades 6-8](#)

Supplemental Instructional Materials

- [KinderArt: Teaching Middle School Art Lessons](#)
- [National Art Education Association: Middle School Resources](#)

Interdisciplinary Connections

- History: students will explore how branding and packaging for goods has evolved as new manufacturing practices developed throughout time.
- Math: students will record the dimensions and determine the area and volume of the forms they create for their faux product.

Technological Integrations

- Students will record and upload a time-lapse of their creative process using a tablet to a class site.
- Students will create a poll to ask viewers which item is real or a replica in the installation of faux products.
- Students will create an Artist Statement through voice/video recording or a word processor, then display the artist statement through a QR code.

NJSLS:

- | | |
|---------------|------------|
| • 1.5.8.Cr1b | 1.5.8.Cr2c |
| • 1.5.8.Pr4a | 1.5.8.Pr5a |
| • 1.5.8.Cn11b | |

Unit 2: The Evolution of Forms

Why is this Unit Important?

The human need to create has been a driving force for societies dating back to prehistoric time. Historians and archaeologists have been able to recreate and understand the daily lives, traditions, and culture of ancient civilizations solely by unveiling the artifacts that were left behind. As students discover the artifacts that have had the largest impact on our current understandings of the past, they will consider the artifacts that they are currently leaving to be discovered by future generations.

Enduring Understandings

- Artifacts are considered to be art, tools, or clothing made by human beings.
- Artifacts can communicate what was most important to a culture, as well as the materials that were most available to them.
- As technology advances, archeologists are able to determine more easily if there is information missing from artifacts and what can cause changes in an artifacts composition, appearance, and location.
- Culture, including sexuality, disability, ethnicity and language, have a strong impact on the media as well as the subject matter for artists.

Essential Questions

- Can the students connect a well-known artifact to its culture, creative process, and purpose?
- Can the students interpret the goal or intended purposes of an artifact and update it to reflect modern society?
- Can the students plan and invent an object to be discovered by future archeologists to reflect their current experience?

Acquired Knowledge

- Artifacts are created by humans and are rarely intended to be constructed for historical purposes.
- Artifacts provide insight to the values of societies as well as the resources that were most available or resources that were monumental and ceremonial.
- Artists capture everyday life through a creative lens, highlighting items that may otherwise be overlooked through careful observation and reconstruction.

Acquired Skills

- Distinguish sculptural medias and processes through viewing and feeling artifacts and replicas
- Determine appropriate media in the creation of long-lasting sculptures and consider the appropriate use of each possible medium through research
- Establish common interests, goals, and needs of community members of the same age and demographic, then communicate the interests, goals, and needs through a three dimensional work of art

Assessments

Formative Assessments:

- Do Now/Draw Now responses and sketches: Draw a person using one of the artifacts presented in the slide. What item do you think FMS students use every day will be most confusing for archeologists to discover in 500 years? How old do you think the oldest writing material is? Draw what you think it looks like.
- Think/Pair Share Group Discussions: Will the artifacts we are creating now more or less useful for historians and archaeologists in the next century to build the narrative of what our lives look like today?
- In-progress critique of student projects: students will respond to the work of their classmates through a digital pin board to provide input regarding what they think the historians of the future will say upon discovering each artifact.

Summative Assessment

- Project: students will create an artifact to be discovered in 200 years to give historians an idea of what life was like for a middle school student in the local area at this time.

Benchmark Assessment

- Create a timeline or map that places the current most commonly known artifacts in the correct place based on the chosen criteria.

Alternative

- Students will recreate a well-known artifact, but update it as if it were made in present day using modern materials.
- Students will develop a diorama of how a well-known artifact was used originally and record a video of the model artifact in action.

Core Instructional Materials

- [National Gallery of Art, Lessons and Resources for Grades 6-8](#)

Supplemental Instructional Materials

- [KinderArt: Teaching Middle School Art Lessons](#)
- [National Art Education Association: Middle School Resources](#)

Interdisciplinary Connections

- Assessment of material longevity and hypothesizing/experimentation: science
- Artifacts and how archeologists unveil and catalog them: social studies

Technological Integrations

- Students will conduct research on available art media to determine which materials will withstand wear over time.
- Students will complete the in-progress critique digitally using an online pin board.

NJSLS:

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| • 1.5.8.Re7a | 1.5.8.Re7b |
| • 1.5.8.Re8a | 1.5.8.Cn11a |

Unit 3: Immersive Art

Why is this Unit Important?

As more individuals recognize the importance of arts exposure in order to live a rich, fulfilling life, immersive art experiences are becoming more prevalent. Audiences no longer want to simply view works of art, they seek the thrill of becoming part of the display itself and interacting with the art in a more individualized way. Through this unit, students will begin to take their use of space and the surrounding areas of a display into consideration in order to draw more attention to their artwork. They will focus on creating interactive elements of an art installation to involve the viewers of their piece more actively than a traditional gallery or museum experience would allow.

Enduring Understandings

- An art installation is not only visual elements, but also includes the area and manner in which they are displayed.
- Interactive art places equal importance on the audience member as part of the piece as any other visual element.
- The element of space must be considered heavily when planning and executing an interactive art installation.
- Culture, including sexuality, disability, ethnicity and language, have a strong impact on the media as well as the subject matter for artists

Essential Questions

- Can the students relate their artwork to the installations of those featured in current galleries?
- Can the students plan an interactive experience for their teachers and peers that utilizes multiple works of art to move throughout a space?
- Can the students collaborate to create a body of work within a selected theme?

Acquired Knowledge

- Interactive art allows viewers to connect with artwork through multisensory interactions, often combining sound, touch, and sight.
- There is a direct correlation between physical engagement and emotional investment when audiences experience art installations.
- Social networking has transformed the initial experience that audiences have with works of art and the artists who create them into a more reciprocal relationship.

Acquired Skills

- Create a multisensory experience through visual art as well as either music, texture, scent, or taste.
- Develop a plan for viewers to physically move through a series of works in a specific order.
- Collaborate with classmates and fellow artists to create an interactive art display based on a selected theme.

Assessments

Formative Assessments:

- Do Now/Draw Now responses and sketches: What theme do you notice between these three pieces? Create a possible title for this set of artworks. Where do you think these works should be displayed? If there was another work of art added to this installation, draw what you think it should look like.
- Think/Pair Share Group Discussions: Develop a plan to maintain your installation past the initial opening; what are materials you think you will need to restock as people interact with your art? Who will maintain the space? How can you plan for and avoid your art getting damaged?
- In-progress critique of student projects: students will complete a self and peer assessment based on their team's progress at the midpoint of the project. They will assess themselves and others based on their craftsmanship, effort, and communication as part of the team, and provide feedback on any technique they need review of.

Summative Assessment

- Project: students will work in teams to create a set of three dimensional artworks that viewers will interact with within a selected theme through taste, touch, or sound. Each team will be responsible for creating an art installation for a gallery opening.

Benchmark Assessment

- Students will formulate a video report after the gallery opening that showcases how viewers interacted with their display, determines the success of each work of art, how they worked with their team, and what they would need to change about their installation if presenting it elsewhere.

Alternative

- Students will create a three-dimensional work of art, then add it to a virtual reality tour of artworks they select to create a themed virtual exhibition with audio.

Core Instructional Materials

- [National Gallery of Art, Lessons and Resources for Grades 6-8](#)

Supplemental Instructional Materials

- [KinderArt: Teaching Middle School Art Lessons](#)
- [National Art Education Association: Middle School Resources](#)

Interdisciplinary Connections

- Addition of sound for each gallery space: music
- Adjusting climate of gallery spaces through light and scent dispersion: science

Technological Integrations

- Students will have the option of creating a virtual tour through an installation rather than a physical installation as described in the alternative assessment.
- Students will use technology to create music or sounds to be played for viewers as they experience the installation.

NJSLS:

- 1.5.8.Cr2a
 - 1.5.8.Re8a
- 1.5.8.Pr6a

Unit 4: Functional Forms

Why is this Unit Important?

Artists have faced the challenge of justifying the notion of “creating for creating’s sake,” or the benefits of art solely for enrichment purposes. Often, when programs reach financial hardships, art programs are part of initial eliminations in budgets. However, once we remove the mindset that art must be a standalone experience only to be had within the walls of galleries or museums, that visual art extends into almost every aspect of our lives, we can begin to place more value on the functional ways that art surrounds us. Art adds value and individuality to our clothing, housewares, architecture, technology, and industrial design. Functional forms aim to answer the question “but what does it do?” with confidence.

Enduring Understandings

- A function is defined as a specific task that is intended for a person or object
- Utilitarian art is art that is initially designed for a specific purpose with the elements of art and principles of design as an important, yet secondary focus
- Artists are able to promote their work and style by adding a function to their art pieces
- Culture, including sexuality, disability, ethnicity and language, have a strong impact on the media as well as the subject matter for artists.

Essential Questions

- Can the students identify the function and determine the success of existing functional art pieces?
- Can the students design a functional ware that is appropriate for their selected media?
- Can the students increase interest in an item based on the design elements they add to it?

Acquired Knowledge

- In order to reach a broader audience and increase marketability of artwork, functional art provides purpose to the elements of art and principles of design.
- When designing functional wares, artists must consider the ways that consumers will interact with the piece to select the most appropriate materials for construction.

- Innovation is crucial to the success of art and design, as when problems evolve, they will require new solutions.

Acquired Skills

- Translate an existing work of art into an everyday item, considering multiple points of view from the consumer to the item
- Create a prototype and design a series of trials for it to undergo prior to creating the final draft of a functional art object
- Use the elements of art and principles of design to create a three dimensional art object that can be used for an everyday routine

Assessments

Formative Assessments:

- Do Now/Draw Now responses and sketches: If Picasso/Mondrian/Seurat designed a coffee mug, draw what that mug would look like? How functional are the items seen in Meret Oppenheim's *Object* and Sun Yuan & Peng Yu's *Can't Help Myself*?
- Think/Pair Share Group Discussions: What are items that you use in your daily life that are worth more money for their design? Create a scale from most increased value to least increased value and place these items on the scale for each member of your group.
- In-progress critique of student projects: students will identify the target consumer and price point they believe their classmate is creating their designed object for based on the midpoint of construction.

Summative Assessment

- Project: students will create an object for a daily or weekly routine designed to capture the mood and elements of an existing work of art.

Benchmark Assessment

- Students will complete an analysis of an existing work of art for their object design prior to incorporating the elements of the piece into their own art and design.

Alternative

- Students will redesign a current art piece that is anti-utilitarian such as Meret Oppenheim's *Object* so that it upholds the artistic integrity, but is able to be used as a functional item.

Core Instructional Materials

- [National Gallery of Art, Lessons and Resources for Grades 6-8](#)

Supplemental Instructional Materials

- [KinderArt: Teaching Middle School Art Lessons](#)
- [National Art Education Association: Middle School Resources](#)

Interdisciplinary Connections

- Product design, marketing, and pricing: financial literacy/math
- History of ceramic functional wares: social studies

Technological Integrations

- Students will have the option to add a motor and program their artwork if appropriate for the function they have selected.
- Students will record an instructional or promotional video demonstrating their redesigned item in use.

NJSLS:

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| • 1.5.8.Re9a | 1.5.8.Cr3a |
| • 1.5.8.Cr2b | 1.5.8.Cr2c |

21st Century Life and Careers

In today's global economy, students need to be lifelong learners who have the knowledge and skills to adapt to an evolving workplace and world. To address these demands, Standard 9, 21st Century Life and Careers, which includes the 12 Career Ready Practices, establishes clear guidelines for what students need to know and be able to do in order to be successful in their future careers and to achieve financial independence.

9.2.8.CAP.10 Evaluate how careers have evolved regionally, nationally and globally.

In each unit, students examine the artform as an entrepreneurial endeavor, and determine how current trends might shape the artform as work and as art.

9.2.8.CAP.19 Relate academic achievement, as represented by high school diplomas, college degrees, and industry credentials, to employability and to potential level.

During the final unit, students examine their portfolio to determine which artworks would benefit from industry and university training in order to merge the enjoyment of artmaking with career potential.

Career Education

9.3.12.AR-VIS-1 Describe the history and evolution of the visual arts and its role and impact on society.

9.3.12.AR-VIS.2 Analyze how the application of visual art elements and principles of design communicate and express ideas.

9.3.12.AR-VIS.3 Analyze and create two and three-dimensional art forms using various media.

In each unit, cultural and historical themes are analyzed alongside exemplars of artforms which allow for transference of the elements of past to new, student-created works.

Technology Integration

9.4.8.CI.2 Repurpose an existing resource in an innovative way.

9.4.8.CI.3 Examine challenges that may exist in the adoption of new ideas.

9.4.8.IML.13 Identify the impact of the creator on the content, production and delivery of information.

In Unit 3, students are introduced to the design process and are prompted to create a product that solves a real world problem. 9.4.8.IML.13 occurs as students meet and interview their potential clients, while 9.4.8.CI.2 is met during the process of gathering materials. Collaboration is achieved via class critique. Finally, 9.4.8.CI.3 is reached through the personal, written reflection, which is part of the summative assessment of the student project in Unit 3.

Interdisciplinary Connection

6.2.8.HistorySE.1.a: Explain how archaeological discoveries are used to develop and enhance understanding of life prior to written records.

RH.11-12.2 Determine the theme, central ideas, information and/or perspective presented in a primary or secondary source; provide an accurate summary of how key events, ideas and/or author's perspective(s) develop over the course of the text.

In Unit 2, students will examine the artist as a storyteller, viewing and translating the narrative from prehistoric works.

6.GA.1. Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.

WHST.11-12.2 Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.

In Units 1 and 4, students are asked to design a gallery space. This will require them to calculate the dimensions of the space the artwork will be displayed in, as well as the area of the artworks being displayed. Students will detail the technical specifications through a proposal, blueprint and through gallery captions and textual information for viewers.

LGBTQ/Disabilities Resources

Statement: Reference to how students will consider the LGBTQ+ and disabled artists listed below is made under Enduring Understandings for each unit.

Unit 1:

- Artwork of Andy Warhol
- Artwork of Lucy Sparrow
- Artwork of

Unit 2:

- Artwork of Niki de Saint Phalle
- Artwork of Felix Gonzalez Torres
- Artwork of Robert Gober
- Artwork of Henri de Toulouse

Unit 3:

- Artwork of Yinka Shonibare
- Artwork of Yayoi Kusama
- Artwork of Do Ho Suh

Unit 4:

- Artwork of Meret Oppenheim
- Artwork of Judy Chicago
- Artwork of Shantell Martin