

Unit Plan Design Template
Engaging Students ~ Fostering Achievement ~ Cultivating 21st Century Global Skills
Written By: Anne Marie Harris,
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Course Title: Advanced Ceramics and Sculpture
Unit Name: Skills & Knowledge of 3-D Sculpture Techniques
Grade Level: 10 to 12

<p>Content Statements</p> <p>In this unit students will learn the key elements of three dimensional design in a variety of mediums, in conjunction with color theory and art history.</p>	<p>NJSLS:</p> <p>9.1.12.A.1-4, B.1-3, C.1-5 1.1.12.D.1-3 1.2.12.A.,B.1,2 1.3.12.D.1 -5 1.4.12.A.1 -4, B.1-3</p> <p>Companion Standards:</p> <p>RST 9-12.5</p>
<p>Overarching Essential Questions</p> <p>How is a work of three dimensional art constructed? What are the possibilities of mediums used to create a three dimensional work of art? What factors can affect the creation of three dimensional art? How does an artist get ideas?</p>	<p>Overarching Enduring Understandings</p> <p>Sculptural works of art create the feeling of space through the arrangement of masses and open spaces. Creative thinking and compositional planning are integral parts of creating visual art.</p>
<p>Unit Essential Questions</p> <p>Why would my skills in the areas of perspective, color theory, drawing, painting and design affect my creation of sculpture? How does sculpture work with the concept of light and shadow to create three dimensionality? How do you sculpt from a solid block of clay? How do you pour molds, throw on the wheel and sculpt by hand? What is form and content? How do I demonstrate my understanding of form and content through sculpture? How do three dimensional works of art from past cultures influence works of art created today? How does philosophy influence works of art? How does literature, music, theater/film inspire a work of art? How is art a part of everyday life? What is iconography and how is that analyzed and interpreted? How do artists come up with ideas? What factors contribute to something being considered a piece of art? How does art communicate ideas?</p>	<p>Unit Enduring Understandings</p> <p>The experimentation and exploration with advanced sculptural materials will assist in gaining awareness of creative possibilities and limitations while increasing technical skill and inventiveness. Strategy and timelines are a part of the production of artwork. Sculpture is not only stationary, but also may have actual movement (with mobiles). Form is the elements of art, the principles of design and the actual, physical materials that the artist has used. Content is what the artist meant to portray, what the artist did portray and how one reacts , as an individual, to both the intended and the actual messages. Works of art are identified in terms of function, history, culture and aesthetics. Artists brainstorm, research, plan and design works of art. Art critics use the criteria of characteristics, function, meaning, and purposes of art and artifacts to evaluate art, along with well-supported defenses of these judgments. All communication involves some type of visual rendering.</p>

	<p>Art is a part of everyday life. There is a connection between art and world events and issues through artists responses in their works of art. Inspiration to create visual art can come from the reading of literature, the listening of music, and watching and listening to theater and film.</p>
<p>Unit Rationale Students must understand the factors that lead to the creation, interpretation and analyzing a work of art. Students must understand how creative and critical thinking skills are necessary to understanding and creating a work of art. Students are aware that the world around us influences the creation of visual art. Students will have the necessary information to create their own visual art.</p>	<p>Unit Overview Students will explore the aspects to create and analyze visual art by participating in discussion, research, observation, projects and problem solving.</p>
<p>Authentic Learning Experiences Critique artwork Creating visual art in a style that reflects society, social groups, cultures, politics, religion, history and philosophy Visual documentation of ideas through creative and critical thinking skills Experiment with a variety of three dimensional media</p>	
<p>21st Century Skills and Themes</p> <p>Global: research world events, issues, cultures, politics, religion, art and history of art from around the world Collaboration: all activities are collaborative in nature Problem solving: answering research questions, learning to translate ideas into visual form Technology: utilizing the internet to access and analyze information; utilizing computer art programs and the tools associated with these programs</p>	
<p>Unit Learning Targets/Scaffolding to CPIs This unit builds on the rudimentary knowledge and experience of the form and function of visual art. They will be prepared to utilize these skills to create their own artworks. The learned knowledge will continue to build in the next unit through the teaching of what makes a person an artist and their careers.</p>	
<p>Key Terms Aesthetics - The appreciation of, and sensitivity towards, works of art, designs, products, objects or artifacts. (vels.vcaa.vic.edu.au/dct/glossary.html) Banding Wheel – A turn able, operated by hand or electricity, to facilitate decoration or hand building. (www.maycocolors.com) Binder – Gum Arabic used to make glazes adhere to the ware. (www.maycocolors.com) Bisque – Ceramics that have been fired to the maturing point of the clay. (www.maycocolors.com) Blistering – Bubbles on a ceramic glaze surface. (www.maycocolors.com) Bone Dry – Greenware that is completely dry, containing no moisture. (www.maycocolors.com) Casting – The art of pouring slip in a plaster mold; also the object is formed. (www.maycocolors.com) Casting Slip – A liquid clay used for casting a mold. (www.maycocolors.com) Ceramics – In broad terms, any type of clay that is fired into a permanent shape in the kiln. Any fired body. (www.maycocolors.com) Clay – Earth that is relatively pure alumina and silica; one of the material used in the manufacture of china and pottery. (www.maycocolors.com) Clay bodies – earthenware, porcelain and stoneware. (www.maycocolors.com) Clean-up Tool – Tool used to clean (fettle) the seams on greenware. (www.maycocolors.com) Color Wheel - A radial diagram of colors in which primary and secondary, and sometimes intermediate colors are displayed as an aid to color identification, choosing, and mixing. A color wheel with primary (red, yellow, blue) and secondary (orange, green, and violet) colors can be seen to the left below. The complement to each color is the color opposite that color on the color wheel. To the right below are diagrams of complementary colors, demonstrating the ratios devised by Johannes Itten, in response to these colors' relative intensities and values. (http://www.artlex.com)</p>	

Complimentary – Those colors that are directly opposite each other on the color wheel. (www.maycocolors.com)

Crackle Glaze – A glaze that has been specifically formulated to produce a pattern of hairline cracks. (www.maycocolors.com)

Craters – Bubbles that break and set as the kiln cools. Some times referred to as Fish Eyes. (www.maycocolors.com)

Crawling – Glaze pulls together or beads up, leaving bare spots on the bisque. (www.maycocolors.com)

Crazing – Refers to a glaze defect of hairline cracks that appear in a fired glaze. (www.maycocolors.com)

Cross Hatch – Criss-cross scratched marks where two pieces of clay are to be joined. Also refers to the application of glaze, forming 45 degree angles to the previous coat. (www.maycocolors.com)

Crystals – Specifically formulated colored glazes that have been fired and ground up in to various sized bits that melt into a glaze, forming bursts of colors. (www.maycocolors.com)

Drape Mold – A plaster over which a rolled out slab of clay is draped to make free form dishes, bowls, etc. (www.maycocolors.com)

Drybrushing – Producing a feathery effect by using a dry brush with wet color; used also for animal fur. Can be done with One Strokes or Acrylics in similar techniques. (www.maycocolors.com)

Dryfooting – Removing glaze from the portion of a piece that comes in contact with the kiln shelf during firing. (www.maycocolors.com)

Earthenware – Non-vitreous (porous) body made from low firing clays. (www.maycocolors.com)

Earth tones – Buff, red, brown. (www.maycocolors.com)

Egyptian Paste – Soluble sodium salts mixed with clay. During drying a salt deposit is left on the surface of the clay, which makes the clay self-glazing during firing. (www.maycocolors.com)

Elements – Wires in a kiln that carry electric current that heats the kiln. (www.maycocolors.com)

Extrude – To draw out; force or press out; force through a narrow opening, as clay (clay extruder).

Fettle – To trim the spaces from cast pieces or the seam lines from greenware. (www.maycocolors.com)

Felting Tool – A soft knife or hard blade knife to trim and remove the mold spare or seam line. (www.maycocolors.com)

Figure and ground - positive and negative shape

Fire Brick – A refractory brick which withstands high temperatures; used in kilns. (www.maycocolors.com)

Firing – Maturing ceramic products at recommended heats. (www.maycocolors.com)

Foreshortening - A way of representing a subject or an object so that it conveys the illusion of depth so that it seems to thrust forward or go back into space. (<http://www.artlex.com>)

Form and content - In art and art criticism, form and content are considered distinct aspects of a work. The term form usually refers to the work's style or methods and content to its "core" or essence. (en.wikipedia.org/wiki/Form_and_content)

Glaze – A glass coating on a ceramic piece. (www.maycocolors.com)

Gloss Glaze – A shiny glaze with a high reflective surface, unlike a matte or satin glaze. (www.maycocolors.com)

Greenware – Clay item before it is subjected to bisque firing. (www.maycocolors.com)

Grog – Finely ground up bisque added to clays to reduce the shrinkage or for thermal shock. (www.maycocolors.com)

Incise – To cut into the clay or greenware surface making a design. (www.maycocolors.com)

Key – Notches cut on the seams of a mold so that the sections will always fit in the same manner. (www.maycocolors.com)

Kiln – A heating chamber for maturing clay glazes and other ceramic materials. (www.maycocolors.com)

Kiln Wash – A refractory coating for kiln shelves to protect them from dipping glaze. (www.maycocolors.com)

Knead – To condition clay. (www.maycocolors.com)

Leatherhard – Cast or hand built pieces that are firm enough to hold their shape without warping, but can still be cut into easily; stick-ons can still be attached. (www.maycocolors.com)

Masking – Blocking out sections of a design that are to be painted. (www.maycocolors.com)

Mold – A plaster form used to produce identical objects by pouring liquid slip into the hollow cavity, then draining. (www.maycocolors.com)

Opaque – Not transparent; completely covers any other color underneath. (www.maycocolors.com)

Perspective and proportion - Scale in drawing refers to the proportion or ratio that defines the size relationships. Models, architectural plans, maps and paintings/drawings all use scale to create the illusion of correct size relationships between objects and figures. (<http://www.creativeglossary.com>)

Plaster – A white powder made of gypsum; quick setting when added to water which molds are made. (www.maycocolors.com)

Polymer clay - A sculpt able material based on the polymer polyvinyl chloride (PVC). It usually contains no clay minerals, and is only called "clay" because its texture and working properties resemble those of mineral clay.

Posts – Square, triangular or cylindrical sections of refractory material used to support shelves in the kiln. (www.maycocolors.com)

Potters Wheel – Used for throwing clay pots; may be manually or electrically driven. (www.maycocolors.com)

Pounce – To pat; also the powered graphite used to transfer pierced patterns. (www.maycocolors.com)

Press Mold – Shallow molds used by pressing soft clay in the cavities; may also be used by pouring slip into the cavities. (www.maycocolors.com)

Pyrometric Cone – Pyramids; compounded of ceramic materials controlled to melt at specific time, temperature relationships used to control heat treatment of ceramic products. (www.maycocolors.com)

Relief – A raised design. (www.maycocolors.com)

Rolling Glaze – Covering the inside of a ware by pouring in thinned glaze, rolling it around the inside surface and then pouring out. (www.maycocolors.com)

Set-Up-Time – Length of time that casting slip must remain in the mold to form the wall of the casting.

Shelf Cone – Pyrometric cone used to tell the temperature at which the temperature on the shelf has been completed using heat work. The actual cone temperature.

Slab – A rolled out section of clay.

Slip – A fluid suspension of clay and other chemical materials in water.

Slip Trailing – Decorating leatherhard greenware with slip applied from a bottle with a narrow nozzle.

Space - 3D space refers to the real space of an object/figure in an environment, as well as the seemingly real appearance of a form drawn/painted to create a sense of real-life illusion on a 2D space. (http://www.creativeglossary.com)

Styles - a form of appearance, design, or production; for example type or make a new style of house (http://www.creativeglossary.com)

Texture - An element of art, texture is the surface quality or "feel" of an object, its smoothness, roughness, softness, etc. Textures may be actual or simulated. Actual textures can be felt with the fingers, while simulated textures are suggested by an artist in the painting of different areas of a picture. (http://www.artlex.com)

Underglaze – A mineral color, usually containing some clay and binder; regular underglazes are opaque and contain a higher percentage of clay than One Strokes (most One Strokes are translucent).

Visual movement - is a visual flow through the composition. It can be the suggestion of motion in a design as you move from object to object by way of placement and position. Directional movement can be created with a value pattern. It is with the placement of dark and light areas that you can move your attention through the format. (http://www.princetonol.com)

Wedge – To condition and work clay into a bubble free mass for throwing or hand building.

Instructional Strategies

Lecture
 Monitor
 Facilitate
 Model and demonstrate

Customizing Learning/ Differentiation

Special needs- students will act as peer coaches to support students with special needs
 ELL- these students will be encouraged their cultural perspective
 Gifted learner- will model for and support the rest of the students and will be offered the opportunity to expand their own understanding of the material

Formative Assessments

Journal or a log
 Sketchbook
 Guided questions
 Demonstrations and sketches
 Research reports

Interdisciplinary Connections

Language arts- writing, logging, oral communication
 Math- measurements, proportions

Social studies- cultural and history of art

Resources

Internet research

Art21: series, teacher Guide and video clips

Maycocolors.com

Ceramics, Two Books In One by Steve Mattison (Sterling Publishing Co., Inc)

Wire Sculpture and Other Three Dimensional Construction by Gerald F. Brommer (Davis Publications)

The New Clay by Nan Roche (Flower Valley Press)

www.ilovetocreate.com

Suggested Activities for Inclusion in Lesson Planning

To learn to critique class work and individual work.

Develop a personal schedule/timeline for project deadlines.

Complete worksheets about sculptural materials and processes.

Create a wire sculpture that has moving parts

Create jewelry using polymer clay.

Paint a 3D sculpture in Patina technique.

Sculpt a bust in plasticine and make a plaster mold.

Create a latex mold using a hand or foot.

Create a feeling of space through a figure sculpture in clay.

Use an unusual material, possibly found objects, to create an abstract sculpture.

Create a mobile from clay, wire or various mixed media.

Pour molds, clean greenware and paint original designs in underglaze on pieces.

Sculpt a functional or decorative piece in the following methods: coil, pinch, slab and one piece in a combination of the methods.

Experiment with various glazes and demonstrate knowledge of cone fire when using more than one glaze on a piece.

Create a slab relief piece using clay and trailing slip; include three levels showing foreground, middle ground and background.

Sculpt an abstract piece from a solid block of wood or clay.

Throw a piece on the wheel.

Create a found object sculpture.

Use the wax resist technique on a mold.

Unit Timeline

Suggested- first, second, third and fourth marking periods (thirty-six weeks)

Appendix

Differentiation	
Enrichment	<ul style="list-style-type: none">● Utilize collaborative media tools● Provide differentiated feedback● Opportunities for reflection● Encourage student voice and input● Model close reading● Distinguish long term and short term goals

<p>Intervention & Modification</p>	<ul style="list-style-type: none"> ● Utilize “skeleton notes” where some required information is already filled in for the student ● Provide access to a variety of tools for responses ● Provide opportunities to build familiarity and to practice with multiple media tools ● Leveled text and activities that adapt as students build skills ● Provide multiple means of action and expression ● Consider learning styles and interests ● Provide differentiated mentors ● Graphic organizers
<p>ELLs</p>	<ul style="list-style-type: none"> ● Pre-teach new vocabulary and meaning of symbols ● Embed glossaries or definitions ● Provide translations ● Connect new vocabulary to background knowledge ● Provide flash cards ● Incorporate as many learning senses as possible ● Portray structure, relationships, and associations through concept webs ● Graphic organizers
<p>21st Century Skills</p>	
<ul style="list-style-type: none"> ● Creativity ● Innovation ● Critical Thinking ● Problem Solving ● Communication ● Collaboration 	
<p>Integrating Technology</p>	
<ul style="list-style-type: none"> ● Chromebooks ● Internet research ● Online programs ● Virtual collaboration and projects ● Presentations using presentation hardware and software 	