



Ceramics - Unit 1 - Skills and Techniques

Unit Focus

This studio-intensive course is designed to take students on a journey from raw material to finished art, fostering both technical mastery and personal growth. Throughout this trimester, students will engage deeply with the material properties of clay and the strategic demands of ceramic production. To ensure success our curriculum is intentionally structured around two core Profile of a Graduate (POG) competencies: Design and Self-Awareness. Students will move beyond simple creation by developing strategic plans for their work. Whether it is calculating shrinkage rates, selecting the correct wedging method, or planning the structural integrity of a complex, multi-component piece, students will learn to examine the impact of each step on their finished product. We emphasize the importance of iterative refinement—taking feedback from peers and self-reflection to purposefully improve a piece before it reaches the kiln. Ceramic work requires immense patience and the ability to pivot. Students will practice reflection by identifying their personal strengths and areas for growth. They will be tasked with managing their time, prioritizing multi-stage projects, and taking full responsibility for their learning outcomes. As they encounter the unpredictable nature of clay, they will practice making informed decisions based on evidence, considering potential consequences for their final work.

Stage 1: Desired Results - Key Understandings

Standard(s)	Transfer	
National Core Arts Standards Visual Arts: HS Proficient <ul style="list-style-type: none">Document the process of developing ideas from early stages to fully elaborated ideas. (VA:Cn10.1.HSI.a)Use multiple approaches to begin creative endeavors. (VA:Cr1.1.HSI.a)Explain how traditional and nontraditional materials may impact human health and the environment and demonstrate safe handling of materials, tools, and equipment. (VA:Cr2.2.HSI.a)Analyze and evaluate the reasons and ways an exhibition is presented. (VA:Pr5.1.HSI.a)Establish relevant criteria in order to evaluate a work of art or collection of works. (VA:Re9.1.HSI.a) Madison Public Schools Profile of a Graduate <ul style="list-style-type: none">Design: Engaging in a process to refine a product for an intended audience and purpose. (POG.2.2)Self-Awareness: Examining current performance critically to identify steps/ strategies to persist. (POG.4.1)	<i>Students will be able to independently use their learning to...</i> T1 Troubleshoot and iterate when faced with technical failure (cracks, collapses, or glaze defects) by identifying the root cause and adjusting their physical approach. T2 Develop and refine techniques and skills through purposeful practice and application to become more fluent T3 Engage in critique to inform next steps or deepen examination of an artistic work	
	Meaning	
	Understanding(s)	Essential Question(s)
	<i>Students will understand that...</i> U1 Success in ceramics is a combination of the artist's intent and the physical limitations of the medium. U2 The choice of construction method (Slab vs. Coil vs. Wheel) dictates the "personality" and structural possibilities of the final form. U3 Glazing is a calculated risk where the artist must decide between the precision and control one gets from low-fire glazes and the serendipity and discovery one gets with high-fire glazes. U4 The most critical stage of ceramic production often happens when the work is leather-hard; refinement is where a piece becomes a finished work (ready to be fired and glazed).	<i>Students will keep considering...</i> Q1 How does clay "remember" how it was formed? Q2 What determines the success of a ceramic work of art: its utility, its aesthetic, or its structural integrity? Q3 How does the choice between predictability (low-fire/underglaze) and spontaneity (high-fire/reduction) alter the expressive intent of the work? Q4 How does the process of trimming and refining reflect an artist's commitment to craftsmanship?

Stage 1: Desired Results - Key Understandings

	Acquisition of Knowledge and Skill	
	Knowledge	Skill(s)
	<p><i>Students will know...</i></p> <p>K1 The Drying Cycle: The distinct 6 stages of clay (from Slip to Glazeware) and how each stage dictates what can be done to the piece.</p> <p>K2 Glaze Chemistry: The difference between Low-Fire (stable/opaque) and High-Fire (reactive/fluid) glazes and how "Specific Gravity" affects application.</p> <p>K3 Ceramic Vocabulary: Terms such as Vitrification, S-cracks, Scoring/ Slipping, Plasticity, Leather hard, Bonedry, Bisque, Low-fire glaze, and Highfire glaze</p>	<p><i>Students will be skilled at...</i></p> <p>S1 Wedging clay using at least one taught method (Rams Head or Spiral) to ensure a homogenized, air-bubble-free body.</p> <p>S2 Centering clay on the wheel using body-bracing techniques rather than raw arm strength.</p> <p>S3 pulling walls to a consistent thickness (¼” to 3/8”) to create a good “feel” to a ceramic piece also while ensuring structural integrity.</p> <p>S4 Trimming a piece to reduce its weight, better define its shape, and remove any imperfections.</p> <p>S5 Scoring and Slipping components together to create a bond that won't fall apart before glazing.</p> <p>S6 Applying glazes using different techniques (brushing, pouring, and dipping) as well as the proper number of layers based on desired outcomes while making sure the glaze won't drip and bond to kiln shelves.</p> <p>S7 Additive and subtractive methods of creating designs on clay.</p>