GEOMETRY AND EXPERIMENTATION:
OP ART PAINTING
High School Art: Grade 9 and 10

TIME AND DURATION: 25 classes suggested
• One class for Teaching Artist Presentation
• One hour+ for student museum field trip

MEASURABLE OBJECTIVES:
• Students will create an original acrylic painting based on Op Art and Concrete Art.
• Students will experiment with color and color theories.
• Students will prepare multiple preliminary sketches.
• Students will write in a reflective narrative about the process.

CONNECTION TO THE BECHTLER COLLECTION:
The Bechtler family collected many works from Op Artists like Victor Vasarely, Bridget Riley, Richard Lohse, and Max Bill. Bill was a friend of the Bechtler family and Bessie Bechtler purchased the granite sculpture “Untitled” as an anniversary gift to Hans. Bill personally installed the work in the Bechtler family home. This piece now resides on the second floor terrace at the Museum. Students will view “Untitled” by Max Bill and works by his contemporaries focusing on non-objective design, geometric forms, and use of color.

LESSON OVERVIEW:
Students will investigate Optical and Concrete Art and create two-dimensional acrylic paintings. Students will build a working knowledge of both art movements and its influence on modern artists through a museum visit and an in-depth discussion. This project requires students to use creative and critical thinking to design geometric works of art.
MATERIALS:
- Sketch materials: pencils, paper
- Newsprint
- Canvases/canvas panels
- Acrylic paint (assorted colors)
- Paintbrushes (assorted sizes)
- Painter's tape
- Scissors
- Rulers

VOCABULARY:
- **Op Art** - coined in 1964, this term refers to a three year period when artists used geometry, math, and vibrant paint colors to create an optical illusion that seemed to vibrate and move on two-dimensional surfaces.
- **Concrete Art** - abstract art that is entirely free of any basis in observed reality and that has no symbolic meaning.
- **Optical Illusion** - something that deceives the eye by appearing to be other than it is.
- **Two-Dimensional** - having its elements organized in terms of a flat surface.
- **Three-Dimensional** - occupying space defined through the dimensions of height, width, and depth.
- **Rhythm** - a particular visual “beat” marking the movement of the viewer’s eye through a work, often established by repetition of similar or varying elements.
- **Trompe-l'oeil** - means “fool the eye”. Style of painting where the artist creates the illusion of three-dimensional objects.
- **Bauhaus** - an art school in Germany that combined crafts and the fine arts, and was famous for their approach to design, open from 1919 to 1933. The German term, Bauhaus, was understood to mean “School of Building”.
- **Geometric shape** - usually man-made shapes that have precise edges. Triangles, squares, circles, and the like.
- **Non-objective** - having no recognizable object as the subject matter; art work based on arrangement, properties and principles of design elements.
- **Color Theory** - a body of practical guidance to color mixing and the visual effects of a specific color combination.
- **Shade** - dark value of a color made by adding black.
- **Value** - the range of possible lightness or darkness within a given medium.
PROCEDURES:

PRIOR KNOWLEDGE:
- Students should have a basic knowledge of the elements and principles of design.
- Students should have earlier knowledge of basic shape and geometric forms.
- Students should have experience articulating their ideas in written narrative.

PROCESS:
- Introduce the Bechtler Museum of Modern Art and its collection before attending a tour of the museum with the class. During the visit to the museum, students will take notes on and discuss three artists that will inspire the designs for their Op Art paintings.
- Once students have visited the museum, present an introduction to the project: Geometry and Experimentation: Op Art Painting. Review the vocabulary and processes of acrylic painting in the style of Op Art using examples from modern artists and previous students.
- Students should sketch at least three different ideas for their Op Art painting and focus on use of color and line to create the illusion of movement and form. After receiving feedback, students will select one design and refine it.
- Students will transfer their designs onto the canvas panel using pencils, tape, and rulers. Sections of the painting can be taped off to create crisp lines.
- After the first section is painted and dried, the students will move the tape and paint the next section. This process can be repeated as many times as needed until the entire panel is painted.
- Upon completion of the paintings, students will write a reflective narrative using project specific vocabulary to discuss the creation of their Op Art painting and the success of their final piece.
- Lead the students in a group critique where each student will share highlights from their reflection paper and offer insights about their classmates’ paintings.
DIFFERENTIATION / MODIFICATIONS:
- Personalization of work and individualized problem solving
- Multiple learning styles - Large group/small group interaction; Visual, Tactile, Written, Verbal
- Hands-on Learning
- Individualized as necessary and appropriate for student level and interest
- Cross curricular integration: Math – Geometry and the Golden Mean

STUDENT EVALUATION AND LESSON ASSESSMENT:
- Pre-assessment of student knowledge prior to instruction.
- On-going formative assessment and feedback during the development of designs and creation of the painting.
- Student ability to discuss work in progress using project specific vocabulary.
- Student documentation of beginning inspiration and development of designs through sketches.
- Student reflection on project, problem solving, and learning through written narrative.
- Student critique of finished works using project specific vocabulary.

N.C. ESSENTIAL STANDARDS AND OBJECTIVES:
B.V.1 Use the language of visual arts to communicate effectively.
- B.V.1.2 Apply the Elements of Art and Principles of Design to create art.
I.V.1 Use the language of visual arts to communicate effectively.
- I.V.1.1 Use art vocabulary to critique art.
I.CR.1 Use critical analysis to generate responses to a variety of prompts.
- I.CR.1.2 Critique personal art using personal or teacher-generated criteria.
P.V.2 Apply creative and critical thinking skills to artistic expression.
- P.V.2.3 Understand the relationship of creative expression to the development of personal style.
P.CX.2 Understand the interdisciplinary connections and life applications of the visual arts.
- P.CX.2.2 Understand how knowledge learned in other disciplines is used to solve artistic problems.

NATIONAL CORE ARTS STANDARDS:
Anchor Standard 3 Refine and complete artistic work.
- VA:Cr3.1.11a Engage in constructive critique with peers, then reflect on, reengage, revise, and refine works of art and design in response to personal artistic vision.

Anchor Standard 1 Generate and conceptualize artistic ideas and work.
- VA:Cr1.2.11a Choose from a range of materials and methods of traditional and contemporary artistic practices to plan works of art and design.

PROGRAMS SUPPORT GENEROUSLY CONTRIBUTED BY THE WOMEN'S IMPACT FUND