

The Orange Public Schools

Graphic Arts & Digital Design I



ORANGE TOWNSHIP BOARD OF EDUCATION

Tyrone Tarver

President

Brenda Daughtry

Vice President

Members

Guadalupe Cabido

Cristina Mateo

Derrick Henry

Siaka Sherif

Jeffrey Wingfield

Sueann Gravesande

Shawneque Johnson

SUPERINTENDENT OF SCHOOLS

Gerald Fitzhugh, II, Ed.D.

BUSINESS ADMINISTRATOR/BOARD SECRETARY

Adekunle O. James

EXECUTIVE DIRECTOR OF HUMAN RESOURCES

Glasshebra Jones-Dismuke

DIRECTORS

Shelly Harper, *Special Services*

Karen Harris, *English Language Arts/Testing*

Tina Powell, Ed.D., *Mathematics/Science*

Terri Russo, D.Litt., *Curriculum & Instruction*

PRINCIPALS

Faith Alcantara, *Heywood Avenue School*

Jason Belton, *Orange High School*

Jacquelyn Blanton, *Orange Early Childhood Center*

Debra Joseph-Charles, Ed.D., *Rosa Parks Comm School*

Yancisca Cooke, Ed.D., *Forest Street Comm School*

Cayce Cummins, Ed.D., *Early Childhood Center*

Principal, *Orange Preparatory Academy*

Myron Hackett, Ed.D., *Park Ave. School*

Frank Iannucci, Jr., *Lincoln Avenue School*

Karen Machuca, *Scholars Academy*

Dana Gaines, *Oakwood Avenue Community School*

Erica Stewart, Ed.D., *Twilight*

Robert Pettit, *Cleveland Street School (OLV)*

Denise White, *Central Elementary School*

Principal, *STEM Innovation Academy of the Oranges*

ASSISTANT PRINCIPALS

Carrie Halstead, *Orange High School*

Frank Frantantoni, *Athletic Director, Orange High School*

Olivero Agosto, *Orange Preparatory Academy*

Terence Wesley, *Rosa Parks Community School*

Samantha Sica-Fossella, *Orange Preparatory Academy*

Kavita Cassimiro, *Orange High School*

Devonii Reid, Ed.D., *STEM Innovation Academy*

Joshua Chuy, *Rosa Parks Community School*

Gerald J. Murphy, *Heywood Ave School*

Shadin Belal, Ed. D. *Orange Preparatory Academy*

April Stokes, *Park Avenue School*

Noel Cruz, *Dean of Students, Rosa Parks Community School*

Patrick Yearwood, *Lincoln Avenue School*

Isabel Colon, *Lincoln Avenue School*

Nyree Delgado, *Forest Street Comm School*

SUPERVISORS

Olga Castellanos, *Mathematics (K-4)*

Daniel Ramirez, *Mathematics (5-8)*

Meng Li Chi Liu, *Mathematics (9-12)*

Adrianna Hernandez, *ELA (K-2) & Media Specialist*

David Aytas, *STEM Focused Learning (8-12)*

Henie Parillon, *Science (K-12)*

Rosa Lazzizera, *ELA (3-7) & Media Specialist*

Tia Burnett, *Testing*

Linda Epps, *Social Studies (5-12) /Tech Coordinator*

Jahmel Drakeford, *CTE, Health & Physical Ed (K-12)*

Caroline Onyesonwu, *Bilingual/ESL & World Language*

Frank Tafur, *Guidance*

Amina Mateen, *Special Services*

Janet McCloudden, Ed.D., *Special Services*

Bibliography of Resources

- Adobe. (2020). Adobe Spark (2020) [Web application]. Retrieved 2020, from <https://spark.adobe.com/sp/>
- Adobe. (2020). Photoshop tutorials: Learn how to use Photoshop. Retrieved July 10, 2020, from <https://helpx.adobe.com/photoshop/tutorials.html>
- Adobe. (2020). InDesign tutorials: Learn how to use InDesign. Retrieved July 10, 2020, from <https://helpx.adobe.com/indesign/tutorials.html>
- Adobe. (2020). Illustrator tutorials: Learn how to use Illustrator. Retrieved July 10, 2020, from <https://helpx.adobe.com/illustrator/tutorials.html>
- Adobe. (2020). Color.adobe.com. Retrieved July 10, 2020, from <https://color.adobe.com/>
- Canva. (2020). Canva Design School. Retrieved July 10, 2020, from <https://designschool.canva.com/>
- Corel Corporation. (2020). Gravit Designer [Web application]. Retrieved from <https://www.designer.io/>
- Corel Corporation. (2020). Tutorials. Retrieved July 10, 2020, from <https://www.designer.io/en/tutorials/>
- Driemeyer, C. (2020, January 29). Basic Design Tutorials. Retrieved July 10, 2020, from <https://www.designer.io/en/tutorials/design-basics/>
- Google. (2020). Google Sites [Web application]. Retrieved July 10, 2020, from <https://sites.google.com/>
- Inmage. (2020). Pixlr (Pixlr 2020) [Web application]. Retrieved from <https://pixlr.com/>
- Kutskir, I. (2020). Photopea [Web application]. Retrieved 2020, from <https://www.photopea.com/>
- Kutskir, I. (2020). Photopea Blog. Retrieved July 10, 2020, from <https://blog.photopea.com/>
- Leigh, & Pixlr. (2020, May 21). Pixlr Blog. Retrieved July 10, 2020, from <https://blog.pixlr.com/>
- Perkins, M. (2020). Canva [Web application]. Retrieved 2020, from <https://www.canva.com/>
- Piktochart. (2020). Piktochart [Web application]. Retrieved 2020, from <https://piktochart.com/>
- Pixabay. (2020). 1.8 million+ Stunning Free Images to Use Anywhere - Pixabay. Retrieved, 2020, from <https://pixabay.com/>
- Square, Inc. (2020). Weebly [Web application]. Retrieved 2020, from <https://www.weebly.com/>
- Unsplash. (2020). Beautiful Free Images & Pictures. Retrieved July 10, 2020, from <https://unsplash.com/>
- Venngage Inc. (2020). Venngage [Web application]. Retrieved 2020, from <https://venngage.com/>

Content Area:	Visual & Performing Arts	Grade(s)	9 - 12
----------------------	-------------------------------------	-----------------	---------------

<p>Graphic Arts & Digital Design I</p>	<p>Graphic art is any visual artistic representation typically produced in two-dimensions and includes painting, drawing, photography, printmaking. Graphic art also consists of drawn plans and layouts for interior and architectural designs. Design in the graphic arts often includes typography but also encompasses original drawings, plans, and patterns for the decorative arts (e.g., furniture, tapestry, ceramics), interiors, and architecture.</p> <p>Digital design refers to what is created and produced for viewing on a screen and can include content such as multimedia presentations, web ads, digital billboards and signage, 2D animation and 3D modeling. Standard industry tools for digital design include Illustrator®, Photoshop® and InDesign® and languages featured in digital assets such as HTML, JavaScript and CSS3.</p> <p>This course introduces students to the principles and techniques associated with both graphic arts (e.g. visual perception, value/shadowing, perspective (linear & atmospheric), and color/line/contour) and incorporates visual communication in digital and non-digital environments. Emphasis will be placed on the design-process using methods, strategies, and techniques to create original student artwork. Students will apply their knowledge of the elements and principles of design in order to strengthen their ability to visually communicate ideas on and off-screen. This course explores a range of design techniques using traditional art genres (portrait, still life, landscape) and media (graphite, charcoal, pen & ink) and software programs such as Adobe Photoshop and Illustrator.</p> <p>Students will analyze, critique artworks and learn about the origins of graphic design in the history of art. Students will be exposed to a variety of disciplines within the graphic and digital design field, which include but are not limited to logo design, poster design, typography, packaging design, and illustration to create portfolios, presentations, and showcases in traditional and digital media.</p>
<p>Course Prerequisites: None</p>	
<p>Traditional Media: charcoal, graphite, pen/ink, etc.</p>	
<p>Digital Media: Raster graphics with Photoshop, Pixlr, Photopea Vector graphics with Illustrator, Gravit Designer Desktop publishing with Adobe Spark, Canva, Piktochart</p>	

Course Objectives/Learning Outcomes

Upon completion of this course the student should be able to:

1. Produce an original body of artwork in a variety of traditional and digital mediums that demonstrates mastery of visual literacy, methods, techniques, and cultural understanding.
2. Demonstrate the ability to design successfully within specific requirements and parameters.
3. Design, produce and edit a multi-page presentations and documents using grid visual organization for a commercial or professional audience using desktop publishing and/or graphics software; specifically applying the concepts of visual communication including visual unity, grouping and hierarchy.
4. Complete exploratory projects in design theory and practice which may be used to develop a presentation and/or portfolio of personal work.
5. Develop an understanding of the language of design, which includes critical theory, critique, history, technology, and craftsmanship.
6. Explore specifically the concept of visual perception as applied to visual communication.
7. Define and employ industry standard graphic design terminology to describe various projects and works of art.
8. Demonstrate ability to form and defend value judgments about graphic design and to communicate art ideas, concepts, and requirements to professionals and laypersons.
9. Demonstrate appropriate application of copyright, fair use and/or Creative Commons to an original work.

Common Core Anchor Standards

CCSS.ELA-LITERACY.CCRA.SL.2 Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.

CCSS.ELA-LITERACY.CCRA.SL.5 Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

CCSS.ELA-LITERACY.CCRA.SL.4 Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.

Visual Literacy

Synthesize those skills, media, methods, and technologies appropriate to creating, performing, and/or presenting works of art in dance, music, theater, and visual art.

Create and develop visual form in response to communication problems, including an understanding of principles of visual organization/ composition, information hierarchy, symbolic representation, typography, aesthetics, and the construction of meaningful messages.

Technology Literacy

Understand design-related tools and technology, including their roles in the creation, reproduction, and distribution of visual messages. Relevant tools and technologies include, but are not limited to, drawing, offset printing, photography, and time-based and interactive media (film, video, computer multimedia).

Use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaboratively and to create and communicate knowledge.

Critical Thinking/Information Literacy

Describe and respond to the audiences and contexts, which communication solutions must address, including recognition of the physical, cognitive, cultural, and social human factors that shape design decisions.

develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world, as they relate to the individual, global society, and the environment.

Determine and use the appropriate application of resources in the design, development, and creation of a technological product or system.

Identify current intercultural and global issues as they relate to visual communication. Apply ethical reasoning to create sustainable, and socially and environmentally responsible design solutions.

Unit 1: Drawing with Traditional Media	
Subject: Graphic Arts and Digital Design I	Teacher: Tyler Anewalt
Grade: 9-12	Duration: 10 Weeks
<p style="text-align: center;">Summary of Unit</p> <p>Traditional drawing is a necessary foundation and prerequisite for all creative applications and creative careers. The skills acquired while learning to draw are essential to the development of an individual's ability to accurately perceive visual information. The basic skills employed by learning to draw are perception of edges, perception of spaces, perception of relationships, perception of light & shadow, perception of the whole or gestalt. This unit will cover drawing with traditional media: graphite, charcoal, and ink on paper. The unit focuses on visual perception through observation and rendering of authentic observations through conventional drawing techniques and subjects. Subjects are to include form (still life), figure drawing and portraiture, and linear perspective.</p>	
Topics	
Unit 1.1: Drawing with Graphite Using graphite pencils and graphite sticks Paper types, quality, and care Composition design and layout Preliminary sketching and blocking of subjects Drawing 3-D forms on 2-D surfaces Value and shading techniques Perception of edges and lines Drawing from referenced images and grid drawing Standardized figure portrait proportions Observational drawing Linear Perspective: 1 & 2 point	Unit 1.2: Drawing with Charcoal Perception and rendering of light Value, shading, and blending Figure and gesture drawing Drawing on toned paper or subtractive drawing Unit 1.3: Inking Basics of controlling line with ink Variation of line width and stroke Value and texture with ink Controlling the direction of the stroke
Desired Results	
<i>Essential Questions</i> <ul style="list-style-type: none"> How/why is drawing a foundation for all creative arts and creative careers? How can the skill of observational drawing be applied to other subjects? 	
<i>Enduring Understandings</i> <ul style="list-style-type: none"> The elements of art and principles of design are central to the creation of all works of art. Visual perception is key in drawing as well as other creative processes. Works of art can be judged through individual outlooks in terms of craftsmanship and technical skill, innovation and originality, historical significance and cultural context. 	
<i>21st Century Themes</i>	Global Awareness
	Environmental Literacy
	Health Literacy
	Civic Literacy
	Creativity & Innovation

	Critical Thinking and Problem Solving
	Communication
	Collaboration

Student Learning Targets/Standards

1.1 The Creative Process: All students will demonstrate an understanding of the elements and principles that govern the creation of works of art in dance, music, theatre, and visual art.

- 1.1.12.D.1 - Distinguish innovative applications of the elements of art and principles of design in visual artworks from diverse cultural perspectives and identify specific cross-cultural themes.

1.2 History of the Arts and Culture: All students will understand the role, development, and influence of the arts throughout history and across cultures.

- 1.2.12.A.1 - Determine how dance, music, theatre, and visual art have influenced world cultures throughout history.
- 1.2.12.A.2 - Justify the impact of innovations in the arts (e.g., the availability of music online) on societal norms and habits of mind in various historical eras.

1.3 Performance: All students will synthesize those skills, media, methods, and technologies appropriate to creating, performing, and/or presenting works of art in dance, music, theatre, and visual art.

- 1.3.12.D.1 - Synthesize the elements of art and principles of design in an original portfolio of two- and three-dimensional artworks that reflects personal style and a high degree of technical proficiency and expressivity.
- 1.3.12.D.2 - Produce an original body of artwork in one or more art mediums that demonstrates mastery of visual literacy, methods, techniques, and cultural understanding.
- 1.3.12.D.3 - Organize an exhibit of personal works of visual art that convey a high level of understanding of how the expression of ideas relates to the art media, art mediums, and techniques used.
- 1.3.12.D.4 - Analyze the syntax and compositional and stylistic principles of two- and three-dimensional artworks in multiple art media (including computer-assisted artwork), and interpret themes and symbols suggested by the artworks.
- 1.3.12.D.5 - Identify the styles and artistic processes used in the creation of culturally and historically diverse two- and three-dimensional artworks, and emulate those styles by creating an original body of work.

1.4 Aesthetic Responses & Critique Methodologies: All students will demonstrate and apply an understanding of arts philosophies, judgment, and analysis to works of art in dance, music, theatre, and visual art.

A. Aesthetic Responses

- 1.4.12.A.1 - Use contextual clues to differentiate between unique and common properties and to discern the cultural implications of works of dance, music, theatre, and visual art.
- 1.4.12.A.2 - Speculate on the artist's intent, using discipline-specific arts terminology and citing embedded clues to substantiate the hypothesis.
- 1.4.12.A.3 - Develop informed personal responses to an assortment of artworks across the four arts disciplines (dance, music, theatre, and visual art), using historical significance, craftsmanship, cultural context, and originality as criteria for assigning value to the works.
- 1.4.12.A.4 - Evaluate how exposure to various cultures influences individual, emotional, intellectual, and kinesthetic responses to artwork.

B. Critique Methodologies

- 1.4.12.B.1 - Formulate criteria for arts evaluation using the principles of positive critique and observation of the elements of art and principles of design, and use the criteria to evaluate works of dance, music, theatre, visual, and multimedia artwork from diverse cultural contexts and historical eras.
- 1.4.12.B.2 - Evaluate how an artist's technical proficiency may affect the creation or presentation of a work of art, as well as how the context in which a work is performed or shown may impact perceptions of its significance/meaning.
- 1.4.12.B.3 - Determine the role of art and art-making in a global society by analyzing the influence of technology on the visual, performing, and multimedia arts for consumers, creators, and performers around the world.

Activity Plan

Vocabulary:

Elements of Art: Line, Shape, Form, Color, Texture, Value, Space
Principles of Design: Unity, Variety, Contrast, Balance, Emphasis, Movement, Pattern
Observational Drawing, Proportion, Render
Stroke, Mark Making, Tonal Gradation, Hatching,
Visual Perception, Edges, Light and Shadow, Composition
Linear Perspective, Receding Lines, Horizon Line, Vanishing Point
Still life, Figure, Gesture, Portraiture, Landscape

Reference Materials and Resources:

Instructional drawing books
 Drawing on the Right Side of the Brain, *Betty Edwards*
 The Art of Drawing: The Complete Course, *David Sanmiguel*
Art history textbooks
Step by step drawing books
Online resources
Free stock photo websites:
 <https://unsplash.com/>
 <https://pixabay.com/>
Teacher compiled image and text resources and references
Printing capability for resources and reference images

Materials:

Pencil sharpeners, 90lb drawing paper, graphite pencils, graphite sticks, polymer erasers, blending stumps
Charcoal drawing paper, newsprint paper, compressed charcoal, charcoal pencils, white charcoal, vine charcoal, kneaded erasers
Bristol paper, tracing paper, black markers (various sizes), ink and brushes
Forms and objects for still life, mannequins, rulers/T-squares, drawing boards, clips, tape, reference images
Materials for displaying student work

Activities:

Value scales and exploration of materials
Drawing of 3-D forms on 2-D surfaces
Drawing from reference images and grid drawing
Perspective drawings
Drawing from observation
Contour line drawing
Figure drawing, gesture drawing
Portrait drawing
Preliminary sketching, thumbnail sketching
Subtractive drawing / drawing on toned paper
Critiques and class discussions
Scanning and photographing drawings for digital portfolio

Assessment/Culminating Projects/Rubrics/Critiques

Drawing from Reference Images, Grid Drawing

Observational Drawing

Portraiture, Figure and Gesture Drawing

Linear Perspective Drawing

Subtractive or Drawing on Toned Paper

Unit 2: Bitmap Graphics	
Subject: Graphic Arts and Digital Design I	Teacher: Tyler Anewalt
Grade: 9-12	Duration: 15 Weeks

--	--

Summary of Unit

Bitmap graphics are images composed of a matrix of dots or pixels. Bitmap files store information for a large number of pixels which are organized into a grid to create an image. Bitmap (or Raster) image editing applications are essential tools for creative professionals like designers, graphic artists, and photographers. In addition, professionals in many other fields such as advertising, web development, marketing, and publications use these applications extensively. Most widely used for image editing, retouching, and compositing, Photoshop is the most comprehensive and versatile bitmap image editing software available. In this unit students will become familiar using Photoshop and similar applications to explore the potential for creating and editing bitmap images through a variety of project-based assignments. This unit will provide a foundation of skill and knowledge that will be used across all graphics applications including Photoshop and Illustrator.

Topics

<p>Unit 2.1: Intro to Digital Design Principals of Graphic Design: Contrast, Repetition Alignment, Proximity Copyrights and fair use of images Finding and downloading stock images File management and file organization Native and portable file formats Industry standard applications and alternatives Extended learning resources</p> <p>Unit 2.2: Working with Bitmap Images Application interface, navigation, panels, tools, and menus Creating new documents Image resolution, image size, file size Opening and importing images Using History panel Using Layers panel Create new, duplicate, delete Fill layers and Gradients Arrange, forward/backward Grouping Merge, merge down, flatten Opacity, transparency and fill Blend modes, introduction Crop Tool and image sizing Grids and rulers for alignment Move tool, rotate, and flip commands Transform and constraining proportions Alignment tools Saving native file formats, (.psd,.pxd) Exporting (.jpeg, .png, .pdf)</p>	<p>Unit 3.3: Making Selections and Using Masks Making basic selections with Marquee, Lasso Magic Wand tools Add to and Remove from selections Using Feather Adjusting Tolerance Inverting selections Using Layer Masks Composite imaging</p> <p>Unit 3.4: Retouching and Repairing Clone Stamp tool Healing tool</p> <p>Unit 3.5: Adjustment Layers and Filters Adjustments Common filters</p> <p>Unit 3.6: Digital Painting Color and Swatches panels Foreground/Background color Brush tool: Hardness/softness Stroke/size Paint Bucket and Gradient tools Eyedropper/Color Picker tool Shapes, Fill and Stroke</p> <p>Unit 3.7: Text Typography and use of text in Graphic Design Type tool Point Size Alignment Spacing Typefaces and Font Families</p>
<p style="text-align: center;">Desired Results</p>	
<p><i>Essential Questions</i></p> <ul style="list-style-type: none"> • How has technology influenced art over time? • Why is Photoshop considered an industry standard for editing digital images? • What kinds of products can be made with Photoshop and other graphics applications? • What are the strengths and limitations of bitmap graphics applications compared to traditional drawing? • What professions rely on the use Photoshop? • How can the skills in creating and editing bitmap graphics be used by students? 	

Enduring Understandings

- Photoshop is an industry standard application used to create and edit bitmap images. Free and low-cost alternatives are available, however have limited functionality.
- Mass media images of all kinds are likely to have been edited using Photoshop or another image editing application.
- Raster / Bitmap images are composed of pixels. File size, image resolution, and image detail are determined by the number and arrangement of pixels.

21st Century Themes

Global Awareness

Environmental Literacy

Health Literacy

Civic Literacy

Creativity & Innovation

Critical Thinking and Problem Solving

Communication

Collaboration

Student Learning Targets/Standards

1.1 The Creative Process: All students will demonstrate an understanding of the elements and principles that govern the creation of works of art in dance, music, theatre, and visual art.

- 1.1.12.D.1 - Distinguish innovative applications of the elements of art and principles of design in visual artworks from diverse cultural perspectives and identify specific cross-cultural themes.

1.2 History of the Arts and Culture: All students will understand the role, development, and influence of the arts throughout history and across cultures.

- 1.2.12.A.1 - Determine how dance, music, theatre, and visual art have influenced world cultures throughout history.
- 1.2.12.A.2 - Justify the impact of innovations in the arts (e.g., the availability of music online) on societal norms and habits of mind in various historical eras.

1.3 Performance: All students will synthesize those skills, media, methods, and technologies appropriate to creating, performing, and/or presenting works of art in dance, music, theatre, and visual art.

- 1.3.12.D.1 - Synthesize the elements of art and principles of design in an original portfolio of two- and three-dimensional artworks that reflects personal style and a high degree of technical proficiency and expressivity.
- 1.3.12.D.2 - Produce an original body of artwork in one or more art mediums that demonstrates mastery of visual literacy, methods, techniques, and cultural understanding.
- 1.3.12.D.3 - Organize an exhibit of personal works of visual art that convey a high level of understanding of how the expression of ideas relates to the art media, art mediums, and techniques used.
- 1.3.12.D.4 - Analyze the syntax and compositional and stylistic principles of two- and three-dimensional artworks in multiple art media (including computer-assisted artwork), and interpret themes and symbols suggested by the artworks.
- 1.3.12.D.5 - Identify the styles and artistic processes used in the creation of culturally and historically diverse two- and three-dimensional artworks, and emulate those styles by creating an original body of work.

1.4 Aesthetic Responses & Critique Methodologies: All students will demonstrate and apply an understanding of arts philosophies, judgment, and analysis to works of art in dance, music, theatre, and visual art.

A. Aesthetic Responses

- 1.4.12.A.1 - Use contextual clues to differentiate between unique and common properties and to discern the cultural implications of works of dance, music, theatre, and visual art.
- 1.4.12.A.2 - Speculate on the artist's intent, using discipline-specific arts terminology and citing embedded clues to substantiate the hypothesis.
- 1.4.12.A.3 - Develop informed personal responses to an assortment of artworks across the four arts disciplines (dance, music, theatre, and visual art), using historical significance, craftsmanship, cultural context, and originality as criteria for assigning value to the works.
- 1.4.12.A.4 - Evaluate how exposure to various cultures influences individual, emotional, intellectual, and kinesthetic responses to artwork.

B. Critique Methodologies

- 1.4.12.B.1 - Formulate criteria for arts evaluation using the principles of positive critique and observation of the elements of art and principles of design, and use the criteria to evaluate works of dance, music, theatre, visual, and multimedia artwork from diverse cultural contexts and historical eras.
- 1.4.12.B.2 - Evaluate how an artist's technical proficiency may affect the creation or presentation of a work of art, as well as how the context in which a work is performed or shown may impact perceptions of its significance/meaning.
- 1.4.12.B.3 - Determine the role of art and art-making in a global society by analyzing the influence of technology on the visual, performing, and multimedia arts for consumers, creators, and performers around the world.

Activity Plan

Vocabulary:

Bitmap, Raster Image, Image Resolution, Pixels, PPI, DPI, File Size, Image size
Adobe Creative Cloud, Adobe Photoshop, Native File Format (PSD, PSD, JPEG, PNG, PDF
Menu, Options Bar, Panel, Composition
Selection, Marquee, Lasso, Wand, Tolerance, Feather
Brush, Hardiness, Opacity, Gradient, Fill and Stroke
Hue, Saturation, Desaturate, Brightness, Exposure, Grayscale
Foreground Color, Background Color, Color Picker/Eyedropper Tool, Swatches
Font / Typeface, Point Size, Alignment, Spacing
Scale, Transform, Constrain Proportions, Crop
Layer, Adjustment Layer, Layer Mask, Filter, Blend Modes, Fill Layer, Gradient
Clone Stamp, Healing Brush, Eraser tool

Reference Materials and Resources:

Adobe Photoshop CC Classroom in a Book (2019 Release), Andrew Faulkner and Conrad Chavez
<https://helpx.adobe.com/photoshop/tutorials.html>
<https://blog.photopea.com/>
<https://blog.pixlr.com/>
Free stock photo websites:
<https://unsplash.com/>
<https://pixabay.com/>
<https://color.adobe.com/>

Materials:

Adobe Photoshop
Alternative bitmap graphics applications:
Pixlr E - <https://pixlr.com/e/>
Photopea - <https://www.photopea.com/>
Internet connection
Computers with keyboards and mice (preferred)
Color printer and compatible printer ink
Scanners, cameras (optional)
File storage (Google Drive, USB Flash Drives)
Stock images

Activities:

Follow along tutorials with teacher directed extensions
Importing images from devices and stock photo websites
Creating, editing, compositing, and retouching images
Project assignments and open-ended design challenges
Guided and independent exploration
Saving, organizing files, exporting images
Critiques and class discussions

Assessment/Culminating Projects/Rubrics/Critiques
<p>Digital Painting</p> <p>Symmetric Mandala</p> <p>Digital Collage Composites, Cubism Composite</p> <p>Photograph Retouching and Enhancements</p> <p>Pop Art Portraits</p> <p>Advertisement Design / Greetings Cards Design</p>

Unit 3: Vector Graphics	
Subject: Graphic Arts and Digital Design I	Teacher: Tyler Anewalt
Grade: 9-12	Duration: 10 Weeks
<p style="text-align: center;">Summary of Unit</p> <p>Vector graphics are computer images generated with mathematical formulas. Unlike bitmap images, vector graphics allow images to be scaled to any size without losing detail. Vector graphics are ideal for logos, package designs, illustrations, emoji and cartoons, as well as fonts, and web graphics. Adobe Illustrator is the premier and most comprehensive application for digital drawing and creating vector graphics. Vector graphics applications are essential tools for digital illustrators, designers, web developers, animators, and game developers among many other creative and scientific professionals. This unit introduces students to fundamental controls and tools used for creating vector-based graphics with applications such as Adobe Illustrator. Students will be challenged to use their acquired skills create original works that fit within teacher directed criteria, including logo design and digital illustration.</p>	
Topics	
<p>Unit 3.1: Intro to Vector Graphics</p> <ul style="list-style-type: none"> Comparison of vector and bitmap graphics and applications Intro to application interface Navigation of panels, tools, and menus Vector graphics terminology <ul style="list-style-type: none"> path, anchor point, direction handle Selection tools Layers, folders, and groups, stacking order Art Boards / Pages Creating and saving documents Saving vector file formats (.ai, .eps, .svg, .gvdesign) Importing images Exporting portable files (JPEG, PNG, PDF) 	<p>Unit 3.2: Intro to Drawing with Vectors</p> <ul style="list-style-type: none"> Shape tools and options Pathfinder & Shape Builder / Compound shapes tool Pen tool Freehand, Pencil, and Brush tools Knife tool Fill Color and Stroke/Border Color pallets Color picker/Eyedropper Swatches Opacity/Transparency <p>Unit 3.3: Typography</p> <ul style="list-style-type: none"> Intro/review typographic terms Typefaces and Fonts Text tools, Fill, Stroke Converting text to a path Placing text along a path Logo design
Desired Results	
<p><i>Essential Questions</i></p> <ul style="list-style-type: none"> • What are the differences between Vector and Bitmap graphics? • What are the advantages and disadvantages of using vector graphics instead of bitmap graphics? • How can bitmap and vector images work together? • What are the practical uses of vector graphics for students? 	

Enduring Understandings

- Adobe Illustrator is the most widely used standard application used for creating and editing vector-based graphics. There are free alternatives to Adobe Illustrator such as Gravit Designer, Inkscape and Vecteezy.
- Vector images are made up of anchor points, paths, and direction handles.
- Vector graphics are based on mathematical equations, rather than pixels in a bitmap image.
- Vector images can be scaled to any size, while bitmap images will become pixelated or blurry when enlarged.

21st Century Themes

Global Awareness

Environmental Literacy

Health Literacy

Civic Literacy

Creativity & Innovation

Critical Thinking and Problem Solving

Communication

Collaboration

Student Learning Targets/Standards

1.1 The Creative Process: All students will demonstrate an understanding of the elements and principles that govern the creation of works of art in dance, music, theatre, and visual art.

- 1.1.12.D.1 - Distinguish innovative applications of the elements of art and principles of design in visual artworks from diverse cultural perspectives and identify specific cross-cultural themes.
- 1.1.12.D.2 - Translate literary, musical, theatrical, and dance compositions by using them as stimulus/inspiration for corresponding visual artworks.

1.2 History of the Arts and Culture: All students will understand the role, development, and influence of the arts throughout history and across cultures.

- 1.2.12.A.1 - Determine how dance, music, theatre, and visual art have influenced world cultures throughout history.
- 1.2.12.A.2 - Justify the impact of innovations in the arts (e.g., the availability of music online) on societal norms and habits of mind in various historical eras.

1.3 Performance: All students will synthesize those skills, media, methods, and technologies appropriate to creating, performing, and/or presenting works of art in dance, music, theatre, and visual art.

- 1.3.12.D.1 - Synthesize the elements of art and principles of design in an original portfolio of two- and three-dimensional artworks that reflects personal style and a high degree of technical proficiency and expressivity.
- 1.3.12.D.2 - Produce an original body of artwork in one or more art mediums that demonstrates mastery of visual literacy, methods, techniques, and cultural understanding.
- 1.3.12.D.3 - Organize an exhibit of personal works of visual art that convey a high level of understanding of how the expression of ideas relates to the art media, art mediums, and techniques used.
- 1.3.12.D.4 - Analyze the syntax and compositional and stylistic principles of two- and three-dimensional artworks in multiple art media (including computer-assisted artwork), and interpret themes and symbols suggested by the artworks.
- 1.3.12.D.5 - Identify the styles and artistic processes used in the creation of culturally and historically diverse two- and three-dimensional artworks, and emulate those styles by creating an original body of work.

1.4 Aesthetic Responses & Critique Methodologies: All students will demonstrate and apply an understanding of arts philosophies, judgment, and analysis to works of art in dance, music, theatre, and visual art.

A. Aesthetic Responses

- 1.4.12.A.1 - Use contextual clues to differentiate between unique and common properties and to discern the cultural implications of works of dance, music, theatre, and visual art.
- 1.4.12.A.2 - Speculate on the artist's intent, using discipline-specific arts terminology and citing embedded clues to substantiate the hypothesis.
- 1.4.12.A.3 - Develop informed personal responses to an assortment of artworks across the four arts disciplines (dance, music, theatre, and visual art), using historical significance, craftsmanship, cultural context, and originality as criteria for assigning value to the works.
- 1.4.12.A.4 - Evaluate how exposure to various cultures influences individual, emotional, intellectual, and kinesthetic responses to artwork.

B. Critique Methodologies

- 1.4.12.B.1 - Formulate criteria for arts evaluation using the principles of positive critique and observation of the elements of art and principles of design, and use the criteria to evaluate works of dance, music, theatre, visual, and multimedia artwork from diverse cultural contexts and historical eras.
- 1.4.12.B.2 - Evaluate how an artist's technical proficiency may affect the creation or presentation of a work of art, as well as how the context in which a work is performed or shown may impact perceptions of its significance/meaning.
- 1.4.12.B.3 - Determine the role of art and art-making in a global society by analyzing the influence of technology on the visual, performing, and multimedia arts for consumers, creators, and performers around the world.

Activity Plan

Vocabulary:

Vector Graphic, Art Board/Pages
Anchor Point, Path, Direction Handle
Layer, Layers Panel, Visibility, Lock, Group, Flatten, Merge
Polygon, Ellipse, Rectangle, Compound Shapes, Pathfinder
Typography, Typeface, Font
Bounding box, Transform, Constrain Proportions
Stroke, Fill Color, Border, Gradient, Linear Gradient, Radial Gradient,
Transparency, Opacity, Eye Dropper, Sampling
Direct and Sub-select tools
Hand tool, Knife Tool, Penn tool, Pencil tool
Guides, Alignment

Reference Materials and Resources:

Adobe Illustrator CC Classroom in a Book (2019 Release), Brian Wood
Adobe Learn and Support
<https://helpx.adobe.com/illustrator/tutorials.html>
<https://www.designer.io/en/tutorials/>
<https://www.designer.io/en/tutorials/design-basics/>
Free stock photo websites:
<https://unsplash.com/>
<https://pixabay.com/>
<https://color.adobe.com/>

Materials:

Adobe Illustrator
Alternative vector graphics applications:
 Gravit Designer
 Inkscape, Vectr, Vecteezy
Internet connection
Computers with keyboards and mice (preferred)
Color printer and compatible printer ink
File storage (Google Drive, USB Flash Drives)
Stock bitmap images, stock vector images

Activities:

Follow along tutorials with teacher directed extensions
Vector illustration assignment and projects
Research, brainstorming, and sketching
Importing and editing images from devices and stock websites
Guided and independent exploration
Saving, organizing files, exporting images
Critiques and class discussions

Assessment/Culminating Projects/Rubrics/Critiques
<p>Icon Illustration</p> <p>Landscape Illustration</p> <p>Character Design</p>

Unit 4: Digital and Print Desktop Publishing	
Subject: Graphic Arts and Digital Design I	Teacher: Tyler Anewalt
Grade: 9-12	Duration: 5 Weeks
<p style="text-align: center;">Summary of Unit</p> <p>Desktop publishing is the use of computer applications for the production of print and digital media such as flyers, posters, magazines, newspapers, reports, business cards, as well as and digital and web content. Logical and appealing organization and presentation of content is key to readers reception of information. Desktop publishing applications allow users to organize large amounts of text and images in visually appealing ways to create print, digital, and web ready content. This introduction to desktop publishing through the use of readily available desktop publishing resources will provide students with the skills necessary to design and produce attractive print and digital content. The unit aims to prepare students to create visually appealing content to support their success in academic projects and reports.</p>	
Topics	

<p>Unit 4.1: Intro to Desktop Publishing Introduction to design for publishing Introduction to copyrights and fair use of images Safety and privacy</p> <p>Unit 4.2 File Management and Organization Finding and organizing files on devices and cloud storage Creating directory of folders and files Naming folders and files logically File formats and when to use them Native file formats: .psd/.pxd, .ai, .gvd design Portable file formats .jpeg, .png, .pdf Image resolution File size vs. image size</p> <p>Unit 4.3: Design for an Audience Principals of Graphic Design: Contrast, Repetition Alignment, Proximity Visual Hierarchy of information Visual Unity Using appropriate and appealing visual and audio Including: color, typeface, and images Appropriate use of templates</p>	<p>Unit 4.4 Infographic and Presentation Design Infographics: charts, graphs, diagrams Canva, Piktochart Video and slide presentations Adobe Spark Other software and web-applications for desktop publishing</p> <p>Unit 4.5: Publishing Content Preparing content for web, exporting web ready files Preparing content for print, exporting print ready files Printing Uploading to web Creating and maintaining a digital</p> <p>(Need to make a decision on platform for portfolios: Google sites, Weebly) are there district approved platforms for student portfolios?</p> <p>Are student maintaining 1 portfolio for all classes? Multi year?</p>
<p style="text-align: center;">Desired Results</p>	
<p><i>Essential Questions</i></p> <ul style="list-style-type: none"> • How has desktop publishing changed the way published materials are made and shared? • What can be created with desktop publishing software? • Why are copyrights important? • Why is the design and presentation of content so important? • How are graphic designs and published material judged? What is good and bad graphic design? • What makes content look professional and unprofessional? • What is image resolution and why is it important? • How can desktop publishing skills help students succeed in school and beyond? 	

Enduring Understandings

- The Principals of Graphic Design - contrast, repetition, alignment, and proximity, are utilized to create visual appealing and understandable content for published material.
- Adobe InDesign is the most comprehensive professional desktop publishing application used to combine text and graphics to design printed and digital materials such as flyers, brochures, magazines, newspapers, and books.
- Low cost and easy to use desktop publishing applications like Microsoft Publisher, Google Slides, Adobe Spark, Piktochart, and Canva are readily available and can be used to create academic and professional projects.
- All published and unpublished work is subject to copyright laws.

21st Century Themes

Global Awareness

Environmental Literacy

Health Literacy

Civic Literacy

Creativity & Innovation

Critical Thinking and Problem Solving

Communication

Collaboration

Student Learning Targets/Standards

1.1 The Creative Process: All students will demonstrate an understanding of the elements and principles that govern the creation of works of art in dance, music, theatre, and visual art.

- 1.1.12.D.1 - Distinguish innovative applications of the elements of art and principles of design in visual artworks from diverse cultural perspectives and identify specific cross-cultural themes.
- 1.1.12.D.2 - Translate literary, musical, theatrical, and dance compositions by using them as stimulus/inspiration for corresponding visual artworks.

1.2 History of the Arts and Culture: All students will understand the role, development, and influence of the arts throughout history and across cultures.

- 1.2.12.A.1 - Determine how dance, music, theatre, and visual art have influenced world cultures throughout history.
- 1.2.12.A.2 - Justify the impact of innovations in the arts (e.g., the availability of music online) on societal norms and habits of mind in various historical eras.

1.3 Performance: All students will synthesize those skills, media, methods, and technologies appropriate to creating, performing, and/or presenting works of art in dance, music, theatre, and visual art.

- 1.3.12.D.1 - Synthesize the elements of art and principles of design in an original portfolio of two- and three-dimensional artworks that reflects personal style and a high degree of technical proficiency and expressivity.
- 1.3.12.D.2 - Produce an original body of artwork in one or more art mediums that demonstrates mastery of visual literacy, methods, techniques, and cultural understanding.
- 1.3.12.D.3 - Organize an exhibit of personal works of visual art that convey a high level of understanding of how the expression of ideas relates to the art media, art mediums, and techniques used.
- 1.3.12.D.4 - Analyze the syntax and compositional and stylistic principles of two- and three-dimensional artworks in multiple art media (including computer-assisted artwork), and interpret themes and symbols suggested by the artworks.
- 1.3.12.D.5 - Identify the styles and artistic processes used in the creation of culturally and historically diverse two- and three-dimensional artworks, and emulate those styles by creating an original body of work.

1.4 Aesthetic Responses & Critique Methodologies: All students will demonstrate and apply an understanding of arts philosophies, judgment, and analysis to works of art in dance, music, theatre, and visual art.

A. Aesthetic Responses

- 1.4.12.A.1 - Use contextual clues to differentiate between unique and common properties and to discern the cultural implications of works of dance, music, theatre, and visual art.
- 1.4.12.A.2 - Speculate on the artist's intent, using discipline-specific arts terminology and citing embedded clues to substantiate the hypothesis.
- 1.4.12.A.3 - Develop informed personal responses to an assortment of artworks across the four arts disciplines (dance, music, theatre, and visual art), using historical significance, craftsmanship, cultural context, and originality as criteria for assigning value to the works.
- 1.4.12.A.4 - Evaluate how exposure to various cultures influences individual, emotional, intellectual, and kinesthetic responses to artwork.

B. Critique Methodologies

- 1.4.12.B.1 - Formulate criteria for arts evaluation using the principles of positive critique and observation of the elements of art and principles of design, and use the criteria to evaluate works of dance, music, theatre, visual, and multimedia artwork from diverse cultural contexts and historical eras.
- 1.4.12.B.2 - Evaluate how an artist's technical proficiency may affect the creation or presentation of a work of art, as well as how the context in which a work is performed or shown may impact perceptions of its significance/meaning.
- 1.4.12.B.3 - Determine the role of art and art-making in a global society by analyzing the influence of technology on the visual, performing, and multimedia arts for consumers, creators, and performers around the world.

Activity Plan

Vocabulary:

Principles of Graphic Design: Contrast, Repetition, Alignment, Proximity
Desktop Publishing, Composition, Page Layout
Visual Hierarchy, Visual Unity, Balance
Alignment, Spacing, Constrain Proportions
Composition, Template
Typography, Typeface, Font
Native File Formats: .psd, .pxd, .ai, .gvd
Portable File Formats: .png, .jpeg, .pdf
Image/Page Size, File Size, Image Resolution
Margins, Text box, Bounding Box
Copyright, Fair Use

Reference Materials and Resources:

Google Sites (<https://sites.google.com/>)
Weebly (<https://www.weebly.com/>)
Canva (<https://www.canva.com/>)
Canva Design School (<https://designschool.canva.com/>)
Adobe Spark (<https://spark.adobe.com/>)
Piktochart (<https://piktochart.com/>)
Venngage (<https://venngage.com/>)
<https://helpx.adobe.com/indesign/tutorials.html>
Free stock photo websites:
<https://unsplash.com/>
<https://pixabay.com/>

Materials:

Adobe InDesign
Adobe Spark
Canva
Piktochart
Internet connection
Computers with keyboards and mice (preferred)
Color printer and compatible printer ink
File storage (Google Drive, USB Flash Drives)
Stock bitmap images, stock vector images
Digital portfolio website hosting – Google Sites, Weebly

Activities:

Follow along tutorials with teacher directed extensions
Brainstorming concepts, collecting and preparing images and information
Creating infographics
Poster / flyer layout design
Presentation development and design
Webpage design / creating and maintaining a digital portfolio
Saving and organizing files
Digital portfolio maintenance
Critiques and class discussions

Assessment/Culminating Projects/Rubrics/Critiques

Digital Portfolio

Infographic Poster Design

NJ Visual Arts Standards

1.1 The Creative Process: All students will demonstrate an understanding of the elements and principles that govern the creation of works of art in dance, music, theatre, and visual art.

1.1.12.D.1 - Distinguish innovative applications of the elements of art and principles of design in visual artworks from diverse cultural perspectives and identify specific cross-cultural themes.

1.1.12.D.2 - Translate literary, musical, theatrical, and dance compositions by using them as stimulus/inspiration for corresponding visual artworks.

1.2 History of the Arts and Culture: All students will understand the role, development, and influence of the arts throughout history and across cultures.

1.2.12.A.1 - Determine how dance, music, theatre, and visual art have influenced world cultures throughout history.

1.2.12.A.2 - Justify the impact of innovations in the arts (e.g., the availability of music online) on societal norms and habits of mind in various historical eras.

1.3 Performance: All students will synthesize those skills, media, methods, and technologies appropriate to creating, performing, and/or presenting works of art in dance, music, theatre, and visual art.

1.3.12.D.1 - Synthesize the elements of art and principles of design in an original portfolio of two- and three-dimensional artworks that reflects personal style and a high degree of technical proficiency and expressivity.

1.3.12.D.2 - Produce an original body of artwork in one or more art mediums that demonstrates mastery of visual literacy, methods, techniques, and cultural understanding.

1.3.12.D.3 - Organize an exhibit of personal works of visual art that convey a high level of understanding of how the expression of ideas relates to the art media, art mediums, and techniques used.

1.3.12.D.4 - Analyze the syntax and compositional and stylistic principles of two- and three-dimensional artworks in multiple art media (including computer-assisted artwork), and interpret themes and symbols suggested by the artworks.

1.3.12.D.5 - Identify the styles and artistic processes used in the creation of culturally and historically diverse two- and three-dimensional artworks, and emulate those styles by creating an original body of work.

1.4 Aesthetic Responses & Critique Methodologies: All students will demonstrate and apply an understanding of arts philosophies, judgment, and analysis to works of art in dance, music, theatre, and visual art.

A. Aesthetic Responses

1.4.12.A.1 - Use contextual clues to differentiate between unique and common properties and to discern the cultural implications of works of dance, music, theatre, and visual art.

1.4.12.A.2 - Speculate on the artist's intent, using discipline-specific arts terminology and citing embedded clues to substantiate the hypothesis.

1.4.12.A.3 - Develop informed personal responses to an assortment of artworks across the four arts disciplines (dance, music, theatre, and visual art), using historical significance, craftsmanship, cultural context, and originality as criteria for assigning value to the works.

1.4.12.A.4 - Evaluate how exposure to various cultures influences individual, emotional, intellectual, and kinesthetic responses to artwork.

B. Critique Methodologies

1.4.12.B.1 - Formulate criteria for arts evaluation using the principles of positive critique and observation of the elements of art and principles of design, and use the criteria to evaluate works of dance, music, theatre, visual, and multimedia artwork from diverse cultural contexts and historical eras.

1.4.12.B.2 - Evaluate how an artist's technical proficiency may affect the creation or presentation of a work of art, as well as how the context in which a work is performed or shown may impact perceptions of its significance/meaning.

1.4.12.B.3 - Determine the role of art and art-making in a global society by analyzing the influence of technology on the visual, performing, and multimedia arts for consumers, creators, and performers around the world.