Graphic Arts & Digital Design I



ORANGE TOWNSHIP BOARD OF EDUCATION

Tyrone Tarver

President

Brenda Daughtry

Vice President

Members

Derrick Henry

Guadalupe Cabido Cristina Mateo Derrick Henry Sueann Gravesande
Siaka Sherif Shawneque Johnson
Jeffrey Wingfield

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*Oliverto Agosto, *Orange Preparatory Academy*Terence Wesley, *Rosa Parks Community School*Samantha Sica-Fossella, *Orange Preparatory Academy*Kavita Cassimiro, *Orange High School*

Isabel Colon, *Lincoln Avenue School*Nyree Delgado, *Forest Street Comm School*

Devonii Reid, EdD., 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

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*Kurt Matthews, *ELA (8-12) & 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
Donna Sinisgalli, Ed.D., Visual & Performance Arts

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/

Apple Education. (2020). Everyone Can Create: Drawing on iPad. Apple.

Apple Education. (2020). Everyone Can Create: Teacher Guide. Apple.

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/

Inmagine. (2020). PixIr (PixIr 2020) [Web application]. Retrieved from https://pixIr.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

Graphic Arts & Digital Design I

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.

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 modelling. Standard industry tools for digital design include Illustrator©, Photoshop© and InDesign© and languages featured in digital assets such as HTML, JavaScript and CSS3.

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.

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.

Course Prerequisites: None

Traditional and Digital Drawing:

charcoal, graphite, pen/ink, etc. and digital drawing with a tablet and stylus

Digital Media:

Raster graphics with Photoshop, Photopea Vector graphics with Illustrator, Gravit Designer, Desktop publishing with Adobe Spark, Canva

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.
- 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.
- 10. Demonstrate the ability to utilize current technology to plan, design, and produce graphic art.

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, theatre, 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 and Digital Media

Subject: Graphic Arts and Digital Design I Teacher: Tyler Anewalt

Grade: 9-12 Duration: 10 Weeks

Summary of Unit

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 and communicate visually. The basic skills employed by learning to draw are perception of edges, perception of spaces, perception of relationships, perception of light & shadow, and the perception of the whole or gestalt. This unit will cover drawing with traditional media, such as graphite and charcoal, on paper as well as digital drawing on a tablet with a stylus. 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.

Topics

Unit 1.0 Elements of Art and Principals of Design

Unit 1.1 Traditional Materials

Using graphite pencils and graphite sticks Charcoal, conté, and other traditional drawing mediums

Paper types, quality, and care Value and shading techniques

Basics of controlling line and mark making

Variation of line width and stroke Controlling the direction of the stroke

Documenting and digitizing works on paper

Unit 1.2 Rendering Form

Drawing 3-D forms on 2-D surfaces Blocking, sketching and using construction lines Observational drawing

Unit 1.3 Rendering Light

Perception and rendering of light and shadow Value, shading techniques, and blending

Unit 1.4 Proportion and Composition

Composition design and layout
Perception of edges and lines
Standardized figure portrait proportions
Figure and gesture drawing
Preliminary line sketching
Measuring and scaling aspect ratios
Drawing from referenced images and grid
drawing

Unit 1.5 Perspective

Linear Perspective: 1 & 2 point

Unit 1.6 Digital Drawing

Use of available applications and devices Common functions and key features Saving, exporting, and organizing digital work

Desired Results

Essential Questions

- How/why is drawing a foundation for all creative arts and creative careers?
- How can the skill of drawing be applied to other subjects?

Enduring Understandings

- The elements of art and principals 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.

21st Century Themes Global Awareness

Environmental Literacy

	Health Literacy
	Civic Literacy
	Creativity & Innovation
	Critical Thinking and Problem Solving
	Communication
	Collaboration

- **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

Aesthetics, Gestalt

Observational Drawing, Proportion, Render

Stroke, Mark Making, Tonal Gradation, Hatching, Crosshatching, Stippling, Scumbling

Visual Perception, Edges, Light and Shadow, Composition

Linear Perspective, Receding Lines, Horizon Line, Vanishing Point

Grid, Aspect Ratio, Rule of Thirds

Still life, Figure, Gesture, Portraiture, Landscape

Cast Shadow, Form Shadow, Mid-tone, Highlight

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

Digital Drawing Books

Everyone Can Create: Drawing on iPad, Apple Education

Everyone Can Create Teacher Guide, Apple Education

Art history textbooks and reference books

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

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 (traditional and digital)

Tablets, styluses and digital drawing applications

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
Portraiture
Preliminary sketching, thumbnail sketching
Critiques and class discussions
Documenting and organizing work, portfolio maintenance

Assessment/Culminating Projects/Rubrics/Critiques

Still Life, Geometric Primitives

Drawing from Reference Images, Grid Drawing

Portraiture, Figure and Gesture Drawing

Linear Perspective Drawing: 1-Point

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

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

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

Groupina

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)

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

Unit 3.4: Retouching and Repairing

Clone Stamp tool Healing tool

Unit 3.5: Adjustment Layers and Filters

Adjustments Common filters

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

Unit 3.7: Text

Typography and use of text in Graphic Design

Type tool

Point Size Alignment

Spacing

Spacing

Typefaces and Font Families

Desired Results

Essential Questions

- 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.

21 st Century Themes	Global Awareness
	Environmental Literacy
	Health Literacy
	Civic Literacy
	Creativity & Innovation
	Critical Thinking and Problem Solving
	Communication
	Collaboration

- **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, PXD), 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:

PixIr E - https://pixIr.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

Tablets, styluses and raster graphics applications

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

Bitmap Illustration

Digital Collage Composite

Photograph Retouching and Enhancements

Pop Art Portraits

Unit 3: Vector Graphics

Subject: Graphic Arts and Digital Design I Teacher: Tyler Anewalt

Grade: 9-12 Duration: 10 Weeks

Summary of Unit

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.

Topics

Unit 3.1: Intro to Vector Graphics

Comparison of vector and bitmap graphics and applications

Intro to application interface

Navigation of panels, tools, and menus

Vector graphics terminology

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)

Unit 3.2: Intro to Drawing with Vectors

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

Unit 3.3: Typography

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

Essential Questions

- 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.

21 st Century Themes	Global Awareness
	Environmental Literacy
	Health Literacy
	Civic Literacy
	Creativity & Innovation
	Critical Thinking and Problem Solving
	Communication
	Collaboration

- **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 Handel

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, Boxy SVG

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

Tablets, styluses and vector graphics applications

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

Icon / Clip Art Design

Landscape Illustration

Character Design

Unit 4: Digital and Print Desktop Publishing

Subject: Graphic Arts and Digital Design I Teacher: Tyler Anewalt

Grade: 9-12 Duration: 5 Weeks

Summary of Unit

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.

Topics

Unit 4.1: Intro to Desktop Publishing

Introduction to design for publishing Introduction to copyrights and fair use of images Safety and privacy

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, .gvdesign
Portable file formats .jpeg, .png, .pdf
Image resolution
File size vs. image size

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

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

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 Maintaining a digital portfolio

Desired Results

Essential Questions

- 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.

21 st Century Themes	Global Awareness
	Environmental Literacy
	Health Literacy
	Civic Literacy
	Creativity & Innovation
	Critical Thinking and Problem Solving
	Communication
	Collaboration

- **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, Ballance

Alignment, Spacing, Constrain Proportions

Composition, Template

Typography, Typeface, Font

Native File Formats: .psd, .pxd, .ai, .gvdesign

Portable File Formats: .png, .ipeg, .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

Tablets, styluses and desktop publishing applications

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 Design

Print Design for an Audience: Advertisement Design / Greetings Cards Design

- **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 twoand 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.