DIGITAL IMAGE MANIPULATION
Course Syllabus

Course Number: VA-0311
OCAS Code: None
Course Length: 60 Hours
Career Cluster: Arts, A/V Technology & Communications
Career Pathway: Visual Arts
Career Major(s): Visual Graphic Design

Pre-requisite(s):
Course Description: Students create and manipulate images of varying formats.

Textbooks:
Exploring the Elements of Design by Poppy Evans and Mark A. Thomas, Cengage Delmar Learning (2008)

Course Objectives:
A. Become Familiar with Adobe Photoshop.
   1. Use core features of Photoshop.
   2. Demonstrate organizational and management features of Photoshop.
   3. Explore layers and history in Photoshop.
   4. Demonstrate a functional knowledge of menus and palettes in photo manipulation software.
B. Work with Layers in Adobe Photoshop.
   1. Define layers.
   2. Add and delete layers.
   3. Create and manipulate multiple layers.
   4. Organize layers.
C. Make Selections.
   1. Make a shape selection.
   2. Modify a marquee.

D. Enhanced Selections.
   1. Create and manipulate selections.¹
   2. Utilize the alpha channel.
   3. Extract in Photoshop.
   4. Demonstrate the clone tool.
   5. Use the magic wand.

E. Demonstrate Color Techniques.
   1. Utilize color transformations.
   2. Utilize the color picker.
   3. Demonstrate gradients.
   4. Define and use filters.

F. Use Type in Photoshop.
   1. Create type.
   2. Adjust type.
   3. Use special effects with type.

G. Understand Advanced Type Techniques.
   1. Use type and shapes.
   2. Demonstrate faded type effects.

H. Utilize Paint Tools.
   1. Use appropriate brushes for the project.
   2. Utilize the smudging tool.
   3. Define and use airbrushing.

I. Adjust Colors.
   1. Modify color saturation.
   2. Use color channels to adjust colors.
   3. Perform photographic color correction using levels/curves.¹
   4. Set white and black points.¹
   5. Convert RGB to CMYK/grayscale/indexed color formats.¹

J. Understand Special Layer Functions.
   1. Employ masking techniques.¹
      a. Use layer masks.
      b. Use clipping masks.

K. Understand Clipping Masks, Paths, and Shapes.
   1. Demonstrate the use of clipping groups.
   2. Use the pen tool.
   3. Convert paths.

L. Utilize Filters.
   1. Define and use artistic filters.
   2. Define and use unique filters.
   3. Define and use distort and noise filters.
   4. Define and use render filters.
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M. Discuss Files Types.
   1. JPG
   2. EPS
   3. PSD
   4. DOC
   5. TIFF
   6. AI
   7. PDF

N. Design Images.
   1. Determine line art, halftone, or color image.
   2. Create simple raster base graphic images for output.
   3. Scan image at appropriate resolution.
   4. Import and export images of varying formats.
   5. Restore and retouch photographs.
   6. Create duotones/tritones/quadtones.
   7. Create drop shadows, special edges, transparent layers, bevels, glows, and collage blends, etc.

O. Place Images.
   1. Evaluate photograph quality and appropriateness for application.
   2. Demonstrate the ability to compose images.
   3. Refine images.

P. Discuss Printing and Troubleshooting.
   1. Perform printing/separation functions.

Objectives Q. and R. Required for PASS Visual Art Credit Only

Q. Identify Visual Art Terms.
   1. Identify and apply knowledge of the principles of design in personal artwork and the artwork of others.
      a. Rhythm
      b. Balance
         1. Symmetrical
         2. Asymmetrical
         3. Radial
      c. Contrast
      d. Movement
      e. Variety
      f. Center of interest (emphasis)
      g. Repetition
   2. Identify and apply the elements of art in personal artwork and the art work of others.
      a. Line
      b. Color
      c. Form
      d. Shape
      e. Texture
      f. Value
         1. Light
         2. Dark
      g. Space in works of art
      h. Shape
         1. Geometric
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2. Organic
   i. Colors
      1. Primary
      2. Secondary
      3. Complementary
      4. Intermediates
      5. Neutrals
      6. Tints
      7. Tones
      8. Shades
      9. Values
   j. Lines
      1. Characteristics
      2. Quality
   k. Textures
      1. Tactile
      2. Visual
   l. Space
      1. Background
      2. Middleground
      3. Foreground
      4. Placement
      5. One-point perspective
      6. Two-point perspective
      7. Three-point perspective
      8. Overlap
      9. Negative
      10. Positive
      11. Size
      12. Color

3. Describe exhibitions of original works of art seen in the school or community.
4. Differentiate between art criticism and art reviews, recognizing that criticism is positive as well as negative in its evaluation of a work of art.

R. Observe, Select, and Utilize a Variety of Ideas and Subject Matter in Creating Original Works of Art.
   1. Create original two-and three-dimensional works of art from observation, memory and imagination using a variety of art media.
   2. Develop and apply skills and techniques using a variety of art media, and processes in making two- and three-dimensional works of art.
      a. Drawing
         1. Media: pencils, colored pencils, markers, chalks, crayons, oil-pastels
         2. Processes: sketching, contour line, hatching, crosshatching, stippling, rendering shading

1 ODCTE objectives
2 States’ Career Clusters - Career Cluster Resources for Arts, A/V Technology & Communications
3 Priority Academic Student Skills (PASS) – High School Visual Art
All unmarked objectives are TTC instructor developed.
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Teaching Methods: The class will primarily be taught by the lecture and demonstration method and supported by various media materials to address various learning styles. There will be question and answer sessions over material covered in lecture and media presentations. Supervised lab time is provided for students to complete required projects.

Grading Procedures: 1. Students are graded on theory and shop practice and performance.
2. Each course must be passed with seventy (70%) percent or better.
3. Grading scale: A=90-100%, B=80-89%, C=70-79%, D=60-69%, F=50-59%.

Description of Classroom, Laboratories, and Equipment: Tulsa Technology Center campuses are owned and operated by Tulsa Technology Center School District No. 18. All programs provide students the opportunity to work with professionally certified instructors in modern, well-equipped facilities.

Available Certifications/College Credit: The student may be eligible to take state, national or industry exam after completion of the program. College credit may be issued from Oklahoma State University-Okmulgee or Tulsa Community College. See program counselor for additional information.

College Credit Eligibility: The student must maintain a grade point average of 2.0 or better.