

# STRANDS AND STANDARDS

## DIGITAL MEDIA 1



### Course Description

Digital Media is the process of analyzing, designing, and developing interactive media. Digital Media 1 is the first semester of the first-year digital media course set where students will create and learn digital media applications while using elements of text, graphics, and digital imaging for various formats. This course is designed to provide students with the basic knowledge and skills related to the graphic design industry. It is intended to serve as a starting point for several pathways including Digital Media, Graphics and Printing, 3D Animation and Game Development.

<b>Intended Grade Level</b>	9-12
Units of Credit	0.5
Core Code	35.02.00.00.009
Concurrent Enrollment Core Code	35.02.00.13.009
Prerequisite	None
Skill Certification Test Number	560 997 Adobe Photoshop 996 Adobe Illustrator
Test Weight	0.5
<b>License Area of Concentration</b>	CTE and/or Secondary Education 6-12
<b>Required Endorsement(s)</b>	
Endorsement 1	Multimedia
Endorsement 2	Commercial Art
Endorsement 3	Production Graphics
Endorsement 4	Business & Marketing (CTE/General)
Endorsement 5	Business & Marketing L2 Info Management

## STRAND 1

Students will understand the design process.

### Standard 1

Understand the process of planning a document.

- Research your project (audience, purpose, timeline, page arrangement and production method)
- Brainstorming
- Creating thumbnail / sketches
- Feedback / Revisions

### Standard 2

Understand the principles and elements of design.

- Identify and utilize the following **principles of design**: balance (formal/symmetrical, informal/asymmetrical), contrast, emphasis, movement, unity
- Identify and utilize the following **elements of design**: line, shape, value, texture, color, space (incl. positive and negative), form
- Understand layout design

### Performance Skills

Students will be able to use planning, principles, and elements of design to compose a project.

## STRAND 2

Students will understand color theory.

### Standard 1

Understand the proper use of color in publications.

- Understand the difference between the two basic color modes CMYK (print) and RGB (screen)
- Create variations of color using tint, patterns, gradients, and opacity
- Understand how Bit Depth affects color availability (i.e. 8-bit, 16-bit, 32-bit)

### Standard 2

Color Theory

- Recognize and apply color modes for web-based graphics and printed graphics (RGB, CMYK, and grayscale)
- Recognize and apply the following color properties: hue, saturation, and value (tint and shade)
- Recognize and apply color schemes (complementary, analogous, monochromatic, and triadic)
- Develop a basic understanding of the color wheel
- Understand that colors are used to communicate a mood or message using different colors that are associated with different meanings
- Recognize and apply symbolism/emotions in color (i.e. warm and cool colors).

### Performance Skills

Students will use color to communicate a mood or message.

## STRAND 3

Students will understand principles of typography.

### Standard 1

Identify typeface classifications and their uses. (Serif, Sans-serif, Script, Decorative - see <https://www.fonts.com/content/learning/fontology/level-1/type-anatomy/type-classifications>)

### Standard 2

Know and apply the following concepts:

- Understand that fonts are grouped together in families and given a family name (i.e. Arial, Garamond)
- Utilize the three basic categories of type styles (normal, bold, italic)
- Apply typeface design (serif, sans-serif, script, decorative)
- Apply copyfitting techniques (leading, kerning, tracking, alignment, point size)
- Apply basic text alignment (left, right, centered, and justified)

### Performance Skills

Students will create a project demonstrating knowledge of typography.

## STRAND 4

Students will understand and create vector graphics.

### Standard 1

Know basic operations of tools, panels, and menus in a drawing/illustration application (i.e. Adobe Illustrator, Inkscape, Affinity Designer, etc.).

### Standard 2

Understand, create, and manipulate vector graphics.

- Identify vector graphic formats and their appropriate use (e.g., PDF, AI, EPS, etc.)
- Operate drawing tools to create and manipulate paths (lines and bezier curves) using anchor points, direction handles
- Define and apply stroke, fill (solid and gradient), and opacity
- Utilize appropriate selection tools
- Perform grouping and ungrouping of objects
- Transform objects while constraining proportions
- Create and manage layers
- Use type tools
- Understand final output formats when exporting images for project requirements (compression, resolution)
- Understanding basic keystroke and shortcut keys

### Performance Skills

Students will create a vector image. They will be able to modify a vector image by selecting and manipulating anchors and handles.

## STRAND 5

Students will understand and create raster images.

### Standard 1

Know basic operations of tools, panels, and menus in a painting/photo editing application (i.e. Adobe Photoshop, GIMP, Affinity Photo, etc.).

### Standard 2

Define, create, manipulate, and appropriately use bitmap (pixel based) raster graphics.

- Identify raster graphic formats and their appropriate use (e.g., JPG/JPEG, GIF, TIFF, BMP, PSD, PNG, etc.)
- Acquire image assets (i.e. scan, digital camera, internet search, stock sources, etc.)
- Import/export images for project requirements (i.e.: compression, 72 (screen) vs. 300 (print) resolution)
- Crop, resize, straighten, and transform an image
- Use layers, masks, and selection tools
- Apply filters and effects
- Adjust color, contrast, create gradient
- Understand color schemes (analogous, complementary, monochromatic)
- Apply and maintain transparency or Alpha channels
- Apply restoration tools
- Utilize color selection techniques
- Operate painting and drawing tools
- Practice basic keystroke and shortcut keys

### Performance Skills

Students will create a raster graphic using multiple layers and a variety of tools.

## STRAND 6

Students will understand project management and collaboration

### Standard 1

Understand and practice project management skills.

- Practice asset and file management using folders and naming conventions.
- Understand file size and storage/back-ups

### Standard 2

Develop an awareness of digital and collaborative technologies.

- Explore collaborating technologies (i.e.: Google Drive, Dropbox, Zoom, FTP, WeTransfer, etc.)

## STRAND 7

Students will explore career opportunities and demonstrate understanding of employability competencies.

### Standard 1

Develop career skills related to working in the digital arts industry, including social media.

- Identify occupations related to digital media careers (i.e., graphic/commercial artist, project manager, art director, illustrator, subject matter expert, programmer, etc.).
- Identify knowledge and skills necessary for specific digital arts occupations.
- Identify next levels of education for a given career.

**Standard 2**

Demonstrate workplace skills.

- Collaborate within a team
- Develop employable competencies/characteristics: responsibility, dependability, ethics, respect, and cooperation.
- Media literacy
- Understand construction and purposes of media messages
- Evaluate information critically and competently
- Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of media
- Understand the difference between royalty-free and copyrighted images and text
- Understand the process of obtaining and citing permission for copyrighted works
- See Title 17 United States Code -Section 107 Limitation of exclusive rights: Fair use

**Performance Skills**

Create and finalize a professional portfolio with projects completed during this course. Portfolio should demonstrate a progression of skills.

**Workplace Skills**

Workplace Skills taught:

- Communication
- Teamwork
- Dependability
- Legal requirements / expectations

**Skill Certification Test Points by Strand**

Test Name	Test #	Number of Test Points by Strand										Total Points	Total Questions
		1	2	3	4	5	6	7	8	9	10		