

Digital Media 1

Exam Information	Description
Exam number 560 Items 38 National Career Cluster Digital Technology Arts, Entertainment, & Design Certification available Yes	Digital Media 1 is the first semester of a foundational course in digital media production and design. Candidates will explore the process of analyzing, designing, and developing a variety of digital assets using text, graphics, and digital imaging across multiple formats. This course introduces essential concepts and tools used in the graphic design industry, providing candidates with the core skills needed to begin creating professional-quality media. It also serves as a launchpad for multiple career pathways, including Digital Media, Graphics and Printing, 3D Animation, and Game Development.

Exam Blueprint and Performance Skills

Standard	Percentage of exam score
1. Design Process	16%
2. Color Theory	7%
3. Typography	16%
4. Vector Graphics	21%
5. Raster Images	28%
6. Project Management & Collaboration	2%
7. Careers & Employability	9%

Standard 1 - Design Process (16% of exam score)

Candidates will understand the design process.

Objective 1 Understand the process of planning a document.

1. Research your project (audience, purpose, timeline, page arrangement, and production method)
2. Brainstorming
3. Creating thumbnails / sketches
4. Feedback / revisions

Objective 2 Understand copyright rules and regulations.

1. Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of media
2. Understand the difference between royalty-free and copyrighted images and text
3. Understand the process of obtaining and citing permission for copyrighted works

Objective 3 Explore generative artificial intelligence and its effects on the digital media industry.

1. Explore intellectual property and copyright implications
2. Understand the importance of transparency and communication with use of AI

Performance Skills

Candidates will be able to plan a project using the proper copyright rules & regulations.

Standard 2 - Color Theory (7%)

Candidates will understand color theory and the principles and elements of design.

Objective 1 Understand the proper use of color in publications.

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

Objective 2 Color Theory

1. Recognize and apply color modes for web-based graphics and printed graphics; including RGB, CMYK, and grayscale
2. Recognize and apply the following color properties: hue, saturation, and value, including tint and shade
3. Recognize and apply color schemes: (complementary, analogous, monochromatic, and triadic)
4. Develop a basic understanding of the color wheel
5. Understand that colors are used to communicate a mood or message

Objective 3 Understand the principles and elements of design.

1. Identify and utilize the following principles of design: formal balance/symmetrical, informal balance/asymmetrical, contrast, emphasis, movement, unity
2. Identify and utilize the following elements of design: line, shape, value, texture, color, positive space, negative space, form

Performance Skills

Candidates will apply color theory principles.

Candidates will be able to use the elements & principles of design.

Standard 3 - Typography (16%)

Candidates will understand principles of typography..

Objective 1 Identify typeface classifications and their uses, including Serif, Sans-serif, Script, Decorative, etc.

Objective 2 Know and apply the following concepts:

1. Understand that fonts are grouped together in families and given a family name (i.e. Arial, Garamond)
2. Utilize the three basic categories of type styles, including normal, bold, italic
3. Understand copyfitting techniques, such as leading, kerning, tracking, alignment, point size
4. Understand basic text alignment, such as left, right, centered, and justified

Performance Skills

Candidates will apply basic typeface design principles.

Standard 4 - Vector Graphics (21%)

Candidates will understand and create vector graphics.

Objective 1 Know basic operations of tools, panels, and menus in a drawing/illustration application (i.e. Adobe Illustrator, Inkscape, Affinity Designer, etc.).

Objective 2 Understand, create, and manipulate vector graphics.

1. Identify vector graphic formats and their appropriate use (e.g., PDF, AI, EPS, etc.)
2. Operate drawing tools to create and manipulate paths, like Bezier curves, using anchor points and direction handles
3. Define and apply stroke properties, such as weight and style
4. Define and apply fill properties, such as gradient and opacity
5. Utilize appropriate selection tools
6. Perform grouping and ungrouping of objects
7. Transform objects while constraining proportions
8. Create and manage layers
9. Use of various type tools
10. Understand output formats and properties based on project needs when exporting
11. Understand basic keystroke and shortcut keys

Performance Skills

Candidates will create and modify vector images.

Standard 5 - Raster Images (28%)

Candidates will understand and create raster images.

Objective 1 Know basic operations of tools, panels, and menus in a painting/photo editing application (i.e. Adobe Photoshop, GIMP, Affinity Photo, etc.).

Objective 2 Define, create, manipulate, and appropriately use pixel-based raster graphics.

1. Identify raster graphic formats and their appropriate use (e.g., JPG/JPEG, GIF, TIFF, BMP, PSD, PNG, etc.)
2. Acquire image assets through various means
3. Set project requirements based on where the project will be seen, such as print at 300 ppi or screen 72 at ppi.
4. Crop, resize, straighten, and transform an image
5. Use layers, masks, and selection tools
6. Apply filters and effects
7. Adjust color and contrast properties
8. Create and manipulate gradients
9. Apply restoration tools
10. Utilize appropriate selection tools
11. Utilize various painting and drawing tools
12. Understand output formats and properties based on project needs when exporting
13. Practice basic keystroke and shortcut keys

Performance Skills

Candidates will create and modify raster images.

Standard 6 - Project Management & Collaboration (2%)

Candidates will understand project management and collaboration

Objective 1 Understand and practice project management skills.

1. Practice asset and file management using folders and naming conventions.
2. Understand file size and storage methods.
3. Understand the importance of back-ups and iterations.

Objective 2 Develop an awareness of digital collaborative technologies.

1. Explore collaborative technologies, such as Google Drive, Dropbox, Zoom, Slack, Microsoft TEAMS, etc.)

Standard 7 - Careers & Employability (9%)

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

Objective 1 Develop career skills related to working in the digital arts industry, including social media.

1. Identify occupations related to digital media careers.
2. Identify knowledge and skills necessary for careers in digital media.
3. Identify post-secondary opportunities in digital media.

Objective 2 Demonstrate workplace skills.

1. Collaborate within a team
2. Develop employable competencies and characteristics: responsibility, dependability, ethics, respect, and cooperation.
3. Understand the purpose and consequence of the message within your media.
4. Evaluate information critically and competently

Performance Skills

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