

Digital Media Design

Course Credit	1.0
Grade Levels	9-12
Prerequisites	Career Preparedness OR Business Software Applications I

Digital Media Design provides a creative, hands-on environment in which students collaborate to produce a variety of digital media projects. Students use various hardware, peripherals, software, and web-based tools to learn skills involving graphic design, digital photography, web design, and digital video production. Additionally, the standards are designed for students to engage in critical thinking skills and practice appropriate behavior in the use of technology. Emphasis is placed on exploring and demonstrating business-related skills such as teamwork, interpersonal skills, and ethics while completing their projects.

Foundational standards, shown in the table below, are an important part of every course. Through these standards, students learn and apply safety concepts, explore career opportunities and requirements, practice the skills needed to succeed in the workplace, develop leadership qualities and take advantage of the opportunities afforded by Career and Technical Student Organizations (CTSOs), and learn and practice essential digital literacy skills. The foundational standards are to be incorporated throughout the course.

Each foundational standard completes the stem “*Students will...*”

1. Incorporate safety procedures in handling, operating, and maintaining tools and machinery; handling materials; utilizing personal protective equipment; maintaining a safe work area; and handling hazardous materials and forces.
2. Demonstrate effective workplace and employability skills, including communication, awareness of diversity, positive work ethic, problem-solving, time management, and teamwork.
3. Explore the range of careers available in the field and investigate their educational requirements, and demonstrate job-seeking skills including resume-writing and interviewing.
4. Advocate and practice safe, legal, responsible, and ethical use of information and technology tools specific to the industry pathway.
5. Participate in a Career and Technical Student Organization (CTSO) to increase knowledge and skills and to

Foundational Standards

enhance leadership and teamwork.

6. Discuss and demonstrate ways to value diversity.

DIGITAL MEDIA DESIGN CONTENT STANDARDS

Each content standard completes the stem “*Students will...*”

Hardware and Software

1. Compare and contrast types of multimedia design, including desktop publishing, graphic design, web page design, digital photography, animation, and digital video.
 - a. Describe components of digital design, including text, images, animation, audio, and video.
 - b. Explain how creativity and technical skills can be utilized to create multimedia projects.
2. Use a variety of hardware to digitize information in various formats, including digital camera, video camera, scanner, and mobile devices.
3. Utilize a variety of software and equipment to create, modify, and enhance multimedia projects.
4. Perform basic computer functions as they apply to the multimedia design industry.
 - a. Explain how the file storage capacity of media storage devices is affected by the resolution of photographs and other factors.
 - b. Utilize file system folders, online file management services, and naming conventions to organize and back up files.
5. Demonstrate appropriate use of digital photography equipment and techniques.
 - a. Utilize various photo composition techniques.
Examples: lighting, perspective, candid vs. posed, rule of thirds
 - b. Transfer still shot images from equipment to the computer.

Digital Photography

6. Utilize photo editing software to edit and enhance digital photographs.
Examples: cropping, scaling, brightness/contrast, saturation, levels, hue/color balance, feathering, masking, layering
7. Demonstrate design techniques using graphic design software.
Examples: selecting, resizing, and manipulating images; changing resolutions; rastering; correcting color; creating images
8. Apply the design process to digital media.
 - a. Demonstrate the process of planning a digital document.
 - b. Utilize the elements of design (line, shape, form, texture, pattern, color, value, and space) when creating digital media products.
 - c. Demonstrate the principles of design (contrast, repetition, balance, movement, emphasis, harmony, proportion, and unity) when creating digital media projects.
 - d. Demonstrate the effective use of color in digital media.
9. Identify and apply the principles of typography.
 - a. Describe typeface classifications and their uses, including serif, sans-serif, script, and decorative.
 - b. Identify the anatomy of typography including serif, ascender, descender, x height, counter, baseline, and cap height.
 - c. Identify and apply typography elements including typeface, style, contrast, color, font size, leading, kerning, tracking, alignment, and white space.
10. Use precision software tools to manipulate images.
Examples: deleting, moving, rotating, setting custom alignment guides, extracting, applying filters
11. Apply integration principles to import scanned, digitized graphics and text, tables, charts, and pictures into a publication.

Graphic Design

Video Production

12. Demonstrate the process of pre-production when creating videos.
 - a. Utilize basic storytelling principles.
 - b. Create a storyboard.
 - c. Organize and plan a production including shot list, shoot schedule, and crew and cast responsibilities.
13. Identify and demonstrate effective use of a variety of shots, movements, and angles.

Examples: wide/long, medium, close up, extreme close up, cutaway, over the shoulder, arc, point of view, pan, tilt, zoom, eye level, bird's eye, worm's eye
14. Apply proper transitions, edits, titles, effects, and media to create videos for various purposes.

Examples: promotional videos, documentaries, product videos, training videos, social media videos
15. Compare and contrast elements and purposes of websites, web pages, and web browsers.

Examples: web elements, including hypertext markup language (HTML) tags, headings, and body
16. Develop interactive web pages and sites using a variety of component formats, including HTML, HTML editors, and web authoring programs.

Examples: guest book, forms, hit counter, marquees, hover button, transition, banner advertisements, navigational schemes
17. Determine and apply the appropriate format for digital files for different needs.

Examples: Joint Photographic Experts Group (JPEG), Graphics Interchange Format (GIF), Portable Network Graphics (PNG), Music Player 3 (MP3), Tagged Image File Format (TIFF)
18. Manipulate digital image file sizing.

Example: Optimize the resolution for web and print publications.
19. Summarize laws governing copyright, intellectual property, and software licensing as they relate to multimedia design.

Examples: font usage, photography, illustration, audio and video rights

 - a. Describe the process of obtaining permission to use copyrighted materials.

Web Design

Ethics/Copyright