

# Multimedia Design

Multimedia Design is a one-credit course designed to provide students with hands-on skills involving graphic design, digital photography, Web publishing, and digital video production. Students use various hardware peripherals and software for completing documents.

Career and technical student organizations are integral, cocurricular components of each career and technical education course. These organizations serve as a means to enhance classroom instruction while helping students develop leadership abilities, expand workplace-readiness skills, and broaden opportunities for personal and professional growth.

## Multimedia Hardware and Software

Students will:

1. Compare types of multimedia, including presentation, desktop publishing, Web page design, graphic design, digital photography, and digital video use in creating projects.
2. Utilize a variety of input devices for digitizing multimedia information, including digital camera, video, scanner, Internet downloads, and graphic software.
3. Use a variety of software and equipment to create, modify, and enhance multimedia projects.

## Graphic Design

4. Demonstrate appropriate techniques associated with graphic design.  
Examples: selecting, resizing, manipulating graphics, changing resolution, rastering, retouching photographs, correcting color, creating images
5. Utilize precision tools to manipulate images.  
Examples: deleting, moving, rotating, setting custom alignment guides, extracting and applying filters
6. Utilize graphic design software to create business and personal publications.  
Examples: newsletters, brochures, business cards, calendars
7. Apply integration principles for importing scanned, digitized graphics and text, tables, charts, and pictures into a publication.
8. Utilize research results to interpret the impact of media and copyright laws on media publications.  
Examples: ethical issues, authenticity

## Web Design

9. Explain differences among Web sites, Web pages, and Web browsers.
  - Identifying Web elements, including hypertext markup language (HTML) tags, headings, and body
10. Develop interactive Web pages and sites using a variety of component formats, including HTML, HTML editors, and Web authoring programs.
  - Examples: components—guest book, forms, hit counter, marquees, hover button, transition, banner advertisements, navigational schemes
11. Determine the applicable format for converting digital files.
  - Examples: Joint Photographic Experts Group (JPEG), Graphics Interchange Format (GIF) Portable Network Graphics (PNG), Music Player 3 (MP3), Tagged Image File Format (TIFF)
12. Apply knowledge of project management to ensure a quality product.
13. Demonstrate the manipulation of digital image file sizing.
  - Optimizing resolution for Web and print publications

## Career Opportunities

14. Determine career and entrepreneurial opportunities, responsibilities, and educational and credentialing requirements related to multimedia design.