

**Florida Department of Education
Curriculum Framework**

This program is a replacement for Digital Media/Multimedia Design K100200 (0609070208).

Program Title: Digital Media/Multimedia Design
Program Type: Career Preparatory
Career Cluster: Arts, A/V Technology and Communication

Career Certificate Program		
Program Number	V100100	
CIP Number	0650010219	
Grade Level	30, 31	
Program Length	900 hours	
Teacher Certification	Refer to the Program Structure section.	
CTSO	SkillsUSA	
SOC Codes (all applicable)	For program SOC codes, please see the Program and Course Tables section of the CTE Program Resources page linked below.	
CTE Program Resources	http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.shtml	
Basic Skills Level	Computation (Mathematics): 10	Communications (Reading and Language Arts): 10

Purpose

The purpose of this program is to prepare students for careers as digital media/multimedia specialists.

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster.

The content includes, but is not limited to, practical experiences with specialized skills in multimedia presentations such as imagery, time-based media, internet and visual communication, and audio and video used to produce a variety of interactive multimedia presentations.

Additional Information relevant to this Career and Technical Education (CTE) program is provided at the end of this document.

Program Structure

This program is a planned sequence of instruction consisting of four occupational completion points.

This program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section

1001.44(3)(b), F.S.

To teach the courses listed below, instructors must hold at least one of the teacher certifications indicated for that course.

The following table illustrates the postsecondary program structure:

			Teacher Certification	
A	DIG0081	Theory and Foundations of Design	BUS ED 1 @2	150 hours
B	DIG0082	Multimedia Digital Designer	COMM ART @7 7G	300 hours
C	DIG0084	Multimedia Integrated Producer Designer	COMPU SCI 6	300 hours
D	DIG0085	Multimedia Web Interactive Designer	DIGI MEDIA 7G	150 hours
			PRINTING @7 7G	
			SECRETAR 7 G	
			TEC ED 1 @2	
			ENG&TEC ED1@2	
			TEC ELEC @7	
			TV PRO TEC @7 7G	
			VOE @7	

Florida's Career Readiness Skills for CTE Programs

Employability Skills

01.0	Apply academic skills to workplace scenarios.
01.01	Use reading skills.
01.02	Use writing skills.
01.03	Use mathematical strategies and procedures.
01.04	Use scientific principles and procedures.
02.0	Design a solution to an industry problem.
02.01	Use critical thinking.
02.02	Use creativity.
02.03	Make sound decisions.
02.04	Solve problems.
02.05	Reason.
02.06	Plan and organize.
03.0	Manage resources within an industry project
03.01	Manage time.
03.02	Manage money or resources.
03.03	Manage materials.
03.04	Manage personnel.
04.0	Oversee the subcomponents, operations and output of a technical or organizational system.
04.01	Manage systems.
04.02	Monitor systems.
04.03	Improve systems.
05.0	Use information for decision making.
05.01	Locate information.
05.02	Organize information.
05.03	Use information.
05.04	Analyze information.
05.05	Communicate information.
06.0	Apply relevant technology to workplace scenarios to aid productivity.
06.01	Use technology.
07.0	Interpret and express interpersonal communication.
07.01	Communicate verbally.
07.02	Listen actively.
07.03	Comprehend written material.
07.04	Convey information in writing.
07.05	Communicate nonverbally.
07.06	Interpret nonverbal communication.

08.0	Interact with others to accomplish workplace goals.
08.01	Collaborate with others in a team.
08.02	Respond to customer needs.
08.03	Exercise leadership.
08.04	Negotiate to resolve conflict.
08.05	Respect others.
09.0	Manage personal behavior to maximize productivity and professional growth.
09.01	Demonstrate responsibility and self-discipline.
09.02	Adapt and show flexibility.
09.03	Work independently.
09.04	Demonstrate a willingness to learn.
09.05	Demonstrate integrity.
09.06	Demonstrate professionalism.
09.07	Take initiative.
09.08	Display positive attitude.
09.09	Take responsibility for professional growth.
Job Attainment	
10.0	Find, assess and apply to job opportunities.
10.01	Identify online job posts relevant to his or her career aspirations.
10.02	Compare and contrast the job posts' required qualifications, job duties, compensation, benefits and employers.
10.03	Define what information, documentation and writing prompts are required for the positions.
11.0	Communicate personal competence, character and fit for a job opportunity.
11.01	Develop a resume.
11.02	Write a cover letter.
11.03	Curate a professional portfolio that includes work products.
11.04	Prepare for and experience a mock job interview.
12.0	Cultivate and leverage relationships to professionally advance.
12.01	Request a signed reference letter, letter of recommendation and/or an online skill/professionalism endorsement.
12.02	Develop a plan to cultivate a professional digital footprint.
12.03	Develop a networking plan for a specific industry of interest.

Standards

After successfully completing this program, the student will be able to perform the following:

Theory and Foundations of Design

- 01.0 Demonstrate knowledge of multimedia/design foundations.
- 02.0 Demonstrate basic computer knowledge.
- 03.0 Demonstrate knowledge of photo editing software
- 04.0 Demonstrate knowledge of digital photography
- 05.0 Demonstrate knowledge of color modes.

Multimedia Digital Designer

- 06.0 Demonstrate proficiency in using fonts for advanced design.
- 07.0 Demonstrate proficiency in using illustration software.
- 08.0 Demonstrate knowledge of design layout software.
- 09.0 Demonstrate proficiency using advanced design processes.
- 10.0 Demonstrate proficiency in using presentation software and equipment to produce a complex presentation.

Multimedia Integrated Producer Designer

- 11.0 Demonstrate knowledge of audio fundamentals.
- 12.0 Demonstrate knowledge using audio recording/ editing software.
- 13.0 Demonstrate proficiency using video editing software and equipment.
- 14.0 Demonstrate knowledge of social media.
- 15.0 Demonstrate proficiency using all media to create a promotional campaign.

Multimedia Web Interactive Designer

- 16.0 Identify key animation principles (e.g., momentum, overshoot, bounce, etc.)
- 17.0 Demonstrate understanding of HTML and CSS.
- 18.0 Demonstrate knowledge of preliminary webpage design.
- 19.0 Demonstrate knowledge of authoring software for webpage design.
- 20.0 Apply job readiness, career planning and job seeking skills to meet personal and professional goals.

**Florida Department of Education
Student Performance Standards**

Program Title: Digital Media/Multimedia Design
Career Certificate Program Number: V100100

Course Number: DIG0081

Occupational Completion Point: A

Theory and Foundations of Design – 150 Hours

01.0	Demonstrate knowledge of multimedia/design foundations. The student will be able to:
01.01	Identify characteristics of design for digital media (e.g., web, animation, video, and audio).
01.02	Identify presentation materials (slides/handouts) and presentation marketing formats (e.g., social media, print media, newspaper, billboards, posters, magazines, television, movies, computer presentations, web banners, advertisements and webpages).
01.03	Identify design characteristics (e.g., fonts, size, color modes, backgrounds) that are suited for each type of design format and material.
01.04	Demonstrate knowledge of design theory such as hierarchy, design composition, color theory, typography, balance, repetition, etc.
01.05	Demonstrate knowledge of copyright laws (e.g., copyright statutes, disclaimers, and filing procedures).
01.06	Research and identify job titles and skills needed for career positions in multimedia design.
01.07	Demonstrate knowledge of image size for design types (print, web, computer, television, mobile devices).
01.08	Demonstrate knowledge of presentation vocabulary and terms.
01.09	Recognize and discuss industry trends (i.e., A.R, V.R, A.I., etc.).
01.10	Identify alternative design and presentation software (e.g., Photopoeo, Canva, Adobe Express, etc.).
02.0	Demonstrate basic computer knowledge. The student will be able to:
02.01	Identify basic computer components (e.g., CPU, display settings, ports, and monitor).
02.02	Identify computer specifications.
02.03	Demonstrate best practices of equipment safety and ergonomics.
02.04	Demonstrate knowledge of computer operating systems and platforms.
02.05	Demonstrate use of internal, external, and cloud drives/ storage and data backup.
02.06	Demonstrate and apply understanding of file organization.
02.07	Identify possible software and hardware malfunctions and perform basic troubleshooting operations.
02.08	Demonstrate understanding of multimedia file formats (e.g., EPS, PDF, TIFF, JPEG, PNG, ASCII, MPEG, MIDI, AVI, WAV).
03.0	Demonstrate knowledge of photo editing software. The student will be able to:
03.01	Identify the parts of the software interface.
03.02	Demonstrate the ability to use each of the basic tool sets.
03.03	Demonstrate the ability to import, export, and save images.
03.04	Demonstrate understanding of layers and channels.
03.05	Demonstrate understanding of filters, effects, and plug-ins.
03.06	Demonstrate understanding of file presets.
03.07	Demonstrate the ability to select portions of an image for manipulation.
03.08	Demonstrate the ability to transform selections and images (crop and scale).

03.09	Demonstrate the ability to color-correct images (brightness, hue, and contrast).
03.10	Demonstrate the ability to use tools for image creation and correction.
03.11	Understand non-destructive and destructive operations.
04.0	Demonstrate knowledge of digital photography. The student will be able to:
04.01	Demonstrate knowledge of digital camera types for capturing stills.
04.02	Demonstrate knowledge of digital photography and composition.
04.03	Demonstrate knowledge of digital camera supports and accessories (e.g., tripod, grips, holds, and lights).
04.04	Identify parts of a digital camera (e.g., lens, sensor, battery, and storage).
04.05	Understand digital camera menus and navigation including file formats (e.g., RAW, jpeg, etc.).
04.06	Demonstrate knowledge of camera modes and settings (e.g., F-stops, speed, and ISO).
04.07	Demonstrate understanding of white balance and lighting.
04.08	Demonstrate proper care, use, and storage of digital cameras.
04.09	Demonstrate understanding of digital file transferring and organization.
05.0	Demonstrate knowledge of color modes. The student will be able to:
05.01	Demonstrate knowledge of the color process for printing purposes.
05.02	Demonstrate knowledge of color conversion from display to print.
05.03	Demonstrate knowledge of spot colors.
05.04	Demonstrate knowledge of web-safe colors.
05.05	Explain and implement different color mode (e.g., RGB, CMYK, and HSB).

Course Number: DIG0082

Occupational Completion Point: B

Multimedia Digital Designer – 300 Hours

06.0	Demonstrate proficiency in using fonts for advanced design. The student will be able to:
06.01	Identify the characteristics of fonts (e.g., Sans serif/serif, headline/decorative, script, etc.).
06.02	Demonstrate knowledge of conversion of fonts to outlines.
06.03	Understand the proprietary copyrights of fonts.
06.04	Demonstrate knowledge of standard font formats (e.g., TrueType, PostScript, and OpenType).
06.05	Understand downloading and installing fonts.
07.0	Demonstrate proficiency in using illustration software. The student will be able to:
07.01	Evaluate industry standard illustration software packages.
07.02	Identify characteristics of vector and bitmap images.
07.03	Demonstrate understanding of the software workspace and navigation (e.g., views, tabs, and zoom).
07.04	Demonstrate use of drawing tools to create, combine, and edit basic shapes.
07.05	Demonstrate the ability to transform content (e.g., scale, rotation, and position).
07.06	Demonstrate understanding of Bezier curve and the appropriate tools for manipulation (e.g., direct select, convert anchor point, pen tool, pencil tool, etc.).
07.07	Demonstrate use of color and painting tools (e.g., patterns, gradients, and color palettes).
07.08	Demonstrate the ability to work with type (e.g., formatting, font palette, character panels, and paths).

07.09	Demonstrate use of layers by creating, locking, viewing, pasting, and merging.
07.10	Demonstrate use of blending (gradients and objects).
07.11	Demonstrate use of brushes; download new brushes.
07.12	Demonstrate knowledge of bleed for print media.
08.0	Demonstrate knowledge of design layout software. The student will be able to:
08.01	Identify parts of the software interface.
08.02	Demonstrate the ability to customize and navigate the workspace.
08.03	Demonstrate understanding of pre-flighting.
08.04	Work with styles, graphics, and objects in a design.
08.05	Set up a document and manage pages within the document.
08.06	Demonstrate the use of layers, text frames and graphic frames.
08.07	Determine the appropriate use of grids, columns, gutters, margins, slug, and bleed.
08.08	Demonstrate the ability to align, transform, and group objects.
08.09	Understand typography and text editing (e.g., text wrapping, clipping, masks, etc.).
08.10	Demonstrate understanding of color (e.g., applying, gradients, tint, spot, and management).
08.11	Import and modify graphics (e.g., links, vector/bitmap images, quality, and alpha channels).
08.12	Understand output and exporting functions (e.g., proofs, separations, and prepress).
08.13	Explore file exporting and importing options with other software with page layout software.
08.14	Demonstrate knowledge of exporting files and assets as a package.
09.0	Demonstrate proficiency using advanced design processes. Student will be able to:
20.01	Gather information about client needs and project scope. (e.g., Design brief of RFP (Request Form Proposal)).
20.02	Research client, target audience, competition, and inspiration for the design.
20.03	Create digital iterations as part of design development.
20.04	Present project for evaluation and make modifications to improve the project.
20.05	Use feedback to revise final design for delivery.
20.06	Deliver final design to client using professional methods.
21.0	Demonstrate proficiency in using presentation software and equipment to produce a complex presentation. The student will be able to:
21.01	Using presentation/editing software to create a multimedia presentation that incorporates custom raster graphics, vector graphics, typography, color and shapes and good design principles.
21.02	Demonstrate knowledge of the roles and responsibilities of a multimedia production team (e.g., project manager, creative or design director, content experts, writers, graphic designers, animators, sound designers, videographers, and interface designers/programmers).

Course Number: DIG0084

Occupational Completion Point: C

Multimedia Integrated Producer Designer – 300 Hours

11.0	Demonstrate knowledge of audio fundamentals. The student will be able to:
11.01	Demonstrate understanding of audio including soundwaves and mediums.

11.02	Demonstrate understanding of a waveform.
11.03	Demonstrate understanding of frequency.
11.04	Demonstrate understanding of digitizing analog audio.
11.05	Demonstrate understanding of recording digital audio.
12.0	Demonstrate knowledge using audio recording/ editing software. The student will be able to:
12.01	Demonstrate knowledge of digital audio recording/editing software.
12.02	Identify different types of microphones (unidirectional, omnidirectional, cardioid).
12.03	Set up a multitrack recording session.
12.04	Demonstrate knowledge of equalization, reverb, fades, and compression.
12.05	Demonstrate knowledge about audio mixing.
12.06	Use an audio program to create an audio project that includes music, vocals, and SFX.
13.0	Demonstrate proficiency using video editing software and equipment. The student will be able to:
13.01	Demonstrate knowledge of non-linear editing software.
13.02	Identify components of non-linear video editing equipment.
13.03	Set up non-linear video editing equipment.
13.04	Use storyboarding to plan a short non-linear video project that includes existing video footage with a title, transitions, background sound, voice-over, animation, and rolling credits.
13.05	Use time-based media editing software to create and edit a video that includes video footage with a title, transitions, Foley audio and rolling credits and output to video.
13.06	Collaborate with team members to plan, edit, and shoot video footage utilizing advanced video editing techniques and present a multimedia presentation or product.
13.07	Plan, create, edit and present a short non-linear video with title, transitions, sub and virtual clips, sound, background music, voice-over, and credits.
14.0	Demonstrate knowledge of social media. The student will be able to:
14.01	Identify design strategies to reach and keep a target audience.
14.02	Discuss various social media algorithms.
14.03	Design images for various social media platforms.
14.04	Storyboard animations and/or video clips for various social media platforms.
15.0	Demonstrate proficiency using all media to create a promotional campaign.
15.01	Plan and create a promotional campaign that includes collateral materials, digital photography, webpages, animation, video, and/or audio.

Course Number: DIG0085	
Occupational Completion Point: D	
Multimedia Web Interactive Designer – 150 Hours	
16.0	Identify key animation principles (e.g., momentum, overshoot, bounce, etc.). The student will be able to:
16.01	Demonstrate knowledge of time-based media.
16.02	Demonstrate knowledge of time remapping.
16.03	Demonstrate proficiency in saving and exporting time-based media.

17.0	Demonstrate understanding of HTML and CSS. The student will be able to:
17.01	Demonstrate understanding of HTML coding to write a webpage.
17.02	Demonstrate understanding and applying Cascading Style Sheets (CSS) on an existing webpage.
17.03	Utilize markup validity to ensure compliance with the W3C for all websites created.
18.0	Demonstrate knowledge of preliminary webpage design. The student will be able to:
18.01	Define the difference between website development and previous design knowledge (e.g., flowcharts, wireframing, navigation, etc.).
18.02	Identify styles and other design elements (e.g., backgrounds, colors, fonts, and buttons).
18.03	Demonstrate knowledge of ADA recommendations and compliance for websites.
18.04	Demonstrate knowledge of UX Design (e.g., Progressive Web Applications, Responsive Websites, etc.)
19.0	Demonstrate proficiency in authoring software for webpage design. The student will be able to:
19.01	Demonstrate knowledge of image formats, compression, and file size related to photos and graphics on the Internet.
19.02	Create webpages for publication.
19.03	Format text for webpages (e.g., font families and sizes).
19.04	Create and insert buttons into a webpage and test for accuracy.
19.05	Create, edit, and test links for accuracy and validity links.
19.06	Create, edit and integrate audio, video, and/or animation files into a webpage.
19.07	Demonstrate knowledge of SEO (Search Engine Optimization) by creating meta-commands and keywords for search engines.
19.08	Create and incorporate a form into a webpage.
20.0	Apply job readiness, career planning, and job seeking skills to meet personal and professional goals. The student will be able to:
20.01	Create a digital resume and print it.
20.02	Create and publish a digital and/ or print portfolio.
20.03	Market digital media/multimedia design skills for employment (e.g., Business cards, business social media, logo, stationery, etc.).

Additional Information

Laboratory Activities

Laboratory investigations that include scientific inquiry, research, measurement, problem solving, emerging technologies, tools and equipment, as well as, experimental, quality, and safety procedures are an integral part of this career and technical program/course. Laboratory investigations benefit all students by developing an understanding of the complexity and ambiguity of empirical work, as well as the skills required to manage, operate, calibrate and troubleshoot equipment/tools used to make observations. Students understand measurement error; and have the skills to aggregate, interpret, and present the resulting data. Equipment and supplies should be provided to enhance hands-on experiences for students.

Career and Technical Student Organization (CTSO)

CTSOs are co-curricular career and technical student organizations providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. Other CTSOs not listed in this curriculum framework or recognized by the Florida Department of Education are permissible provided they support student mastery over the standards and benchmarks of this curriculum framework.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the OJT framework apply.

Basic Skills

In Career Certificate Programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Computation (Mathematics) and Communications (Reading and Language Arts). These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination.

Adult students with disabilities, as defined in Section 1004.02, Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01, F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College System Institution must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91, F.S.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their counselor and/or instructors. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Note: postsecondary curriculum and regulated secondary programs cannot be modified.