

**Florida Department of Education
Curriculum Framework**

Program Title: Digital Media/Multimedia Technology
Career Cluster: Arts A/V Technology and Communication

AS	
CIP Number	1611080103
Program Type	College Credit
Standard Length	60 credit hours
CTSO	SkillsUSA
SOC Codes (all applicable)	15-1134 – Web Developers 27-4011 – Audio and Video Equipment Technicians
CTE Program Resources	http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml

Purpose

The purpose of this program is to prepare students for initial employment in the following professions: digital media/multimedia programmer, digital media/multimedia project manager, web designer/web developer/web production artist, audio visual technician/audio technician, lighting technician, graphic animator, graphic designer, videographer/editor, video engineer, digital media/multimedia producer, technical director, instructional designer or interface designer. This program may also be used to provide supplemental training for persons previously or currently employed in these occupations.

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 should include, but not be limited to, the learning of management skills permitting the graduate to oversee the operation of institutional and industrial multiple media operations. Instruction includes: use of multimedia hardware and software, production analysis, the design and production of digital media/multimedia projects, digital media/multimedia management and the application of production skills to solving the problems relating to the integration of multiple media. Also included are skills relating to professionalism, employability, communication, and management.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Digital Media/Multimedia industry: planning, management, finance, technical and product skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

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 60 credit hours.

Standards

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

- 01.0 Use industry standard digital media/multimedia hardware and software.
- 02.0 Create, alter and/or adjust presentations utilizing a variety of digital media/multimedia technologies.
- 03.0 Design and generate still imagery/graphics.
- 04.0 Design and generate video and/or animations in multimedia project(s).
- 05.0 Utilize/create/produce audio technology for digital media/multimedia project(s).
- 06.0 Use computer applications for digital media/multimedia projects.
- 07.0 Produce digital media/multimedia projects.
- 08.0 Demonstrate appropriate communication skills.
- 09.0 Demonstrate appropriate math skills.
- 10.0 Demonstrate employability and entrepreneurial skills.

Florida Department of Education
Student Performance Standards

Program Title: Digital Media/Multimedia Technology
 CIP Numbers: 1611080102
 Program Length: 60 credit hours
 SOC Code(s): 27-4011

Refer to Rule 6A-14.030 (4), F.A.C., for the minimum amount of general education coursework required in the Associate of Science (AS) degree. At the completion of this program, the student will be able to:

01.0	Use industry standard digital media/multimedia hardware and software. The student will be able to:
01.01	Demonstrate the proper care and handling of equipment used in digital media/multimedia.
01.02	Perform pre- and post-production routines with digital media/multimedia hardware and software.
01.03	Familiarize with industry standard equipment and software.
02.0	Create, alter and/or adjust presentations utilizing a variety of digital media/multimedia technologies. The student will be able to:
02.01	Analyze the strengths and weaknesses of presentational media.
02.02	Demonstrate the ability to locate appropriate production resources.
02.03	Utilize production techniques to create industry standard outcomes.
02.04	Adapt learned skills and generate new approaches in order to solve unique production problems.
03.0	Design and generate still imagery/graphics. The student will be able to:
03.01	Capture, manipulate and apply a still imagery/graphics in digital media/multimedia projects.
03.02	Differentiate and optimize still image formats.
03.03	Apply elements of design, principles of composition and qualities of light to still images/graphics in a digital media/multimedia projects.
03.04	Understand the properties of light and how to utilize them in still images/graphics.
03.05	Integrate the use of photographic special effects for digital media/multimedia projects.
03.06	Evaluate photographic quality using appropriate applications.
04.0	Design and generate video and/or animations in multimedia project(s). The student will be able to:

04.01	Capture, manipulate and apply a video and/or animation image in digital media/multimedia projects.
04.02	Differentiate and optimize video and/or animation formats.
04.03	Apply elements of design, principles of composition and qualities of light to video and/or animation in digital media/multimedia projects.
04.04	Integrate the use of video special effects into digital media/multimedia projects.
04.05	Evaluate moving image quality using appropriate application standards.
04.06	Shoot and edit video or create animation to production specifications.
04.07	Understand light and how to utilize/measure properties, intensity and color.
05.0	Utilize/create/produce audio technology for digital media/multimedia project(s). The student will be able to:
05.01	Capture, manipulate and apply audio and sound in digital media/multimedia projects.
05.02	Differentiate and optimize formats for audio.
05.03	Evaluate production needs for microphones.
05.04	Demonstrate proficiency with a multi-channel audio mixing.
05.05	Utilize industry standards for multi-track recording.
05.06	Understand copyright laws as they apply to prerecorded materials.
06.0	Use computer applications for digital media/multimedia projects. The student will be able to:
06.01	Demonstrate a basic proficiency with digital media/multimedia software packages.
06.02	Design and produce digital media/multimedia content.
06.03	Test, edit and de-bug digital media/multimedia content.
06.04	Present digital media/multimedia content.
07.0	Produce digital media/multimedia projects. The student will be able to:
07.01	Assess the needs of the end user or client.
07.02	Analyze available resources.
07.03	Select and apply appropriate media.
07.04	Create the written form of a story/script appropriate to the digital media/multimedia projects.

07.05	Create and prepare a storyboard(s) appropriate to the digital media/multimedia projects.
07.06	Design navigational structure for interactive environments.
07.07	Organize resources and personnel to implement production.
07.08	Evaluate the quality and end user application of finished project.
07.09	Utilize appropriate programming and scripting languages to create interactive digital media/multimedia projects.
08.0	Demonstrate appropriate communication skills. The student will be able to:
08.01	Write logical and understandable statements, or phrases, to accurately fill out forms/invoices commonly used in business and industry.
08.02	Read and understand graphs, charts, diagrams, and tables commonly used in this industry/occupation area.
08.03	Read and follow written and oral instructions.
08.04	Answer and ask questions coherently and concisely.
08.05	Read critically by recognizing assumptions and implications and by evaluating ideas.
08.06	Demonstrate appropriate presentation skills.
09.0	Demonstrate appropriate math skills. The student will be able to:
09.01	Solve problems for volume, weight, area, circumference, proportions, and perimeter measurements for rectangles, squares, and cylinders.
09.02	Add, subtract, multiply and divide using fractions, decimals, and whole numbers.
09.03	Determine production cost and personnel value.
10.0	Demonstrate employability and entrepreneurial skills. The student will be able to:
10.01	Create and write a résumé and cover letter.
10.02	Prepare and develop a portfolio, to be presented in appropriate format.
10.03	Identify acceptable work habits.
10.04	Demonstrate competence in job interview techniques.
10.05	Formulate strategy for job search, employment and career after graduation.
10.06	Understand self-employment and business startup strategies.

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)

SkillsUSA is the intercurricular career and technical student organization(s) 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.

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.

Certificate Programs

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.). This AS degree program includes the following College Credit Certificates:

- Digital Media/Multimedia Authoring (0609070209) - 12 credit hours
- Digital Media/Multimedia Instructional Technology (0609070211) - 15 credit hours
- Digital Media/Multimedia Production (0610010507) - 15 credit hours
- Digital Media/Multimedia Video Production (0609070210) - 12 credit hours
- Digital Media/Multimedia Presentation (0609070219) - 17 credit hours
- Digital Media/Multimedia Web Production (0650010208) - 15 credit hours

Standards for the above certificate programs are contained in separate curriculum frameworks.

Additional Resources

For additional information regarding articulation agreements, Bright Futures Scholarships, Fine Arts/Practical Arts Credit and Equivalent Mathematics and Equally Rigorous Science Courses please refer to:
<http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.shtml>