# Scope & Sequence

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| Course Name: Digital Media **PEIMS Code:** 13027800 | | | **Course Credit:** 1.0  **Course Requirements:** Grade Placement: 9 – 12.  **Prerequisites:** None. |
| **Course Description:** In Digital Media, students will analyze and assess current and emerging technologies, while designing and creating multimedia projects that address customer needs and resolve a problem. Students will implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. The knowledge and skills acquired and practiced will enable students to successfully perform and interact in a technology-driven society. Students will enhance reading, writing, computing, communication, and critical thinking and apply them to the IT environment. | | | |
| **NOTE:** This is a suggested scope and sequence for the course content. This content will work with any textbook or instructional materials. If locally adapted, make sure all TEKS are covered. | | | |
| **Total Number of Periods**  **Total Number of Minutes**  **Total Number of Hours** | 175 Periods  7920 Minutes  132 Hours\* | \*Schedule calculations based on 175/180 calendar days. For 0.5 credit courses, schedule is calculated out of 88/90 days. Scope and sequence allows additional time for guest speakers, student presentations, field trips, remediation, extended learning activities, etc. | |
| **Unit Number, Title, and Brief Description** | **# of Class Periods\***  (assumes 45-minute periods)  Total minutes per unit | **TEKS Covered**  **130.307. (c) Knowledge and Skills** | |
| **Unit 1: Career Exploration and Employability**  Students will expand their knowledge base and interest in careers and entrepreneurship opportunities in the field of Information Technology. Students will explore and discuss employment opportunities and industry certifications and requirements in small groups and as a class as they develop individualized career preparation plans. Students will discover and use resources available through CTSOs or other extracurricular organization(s) to further develop leadership and employability skills. Students will discuss and demonstrate appropriate and proper etiquette and behavior as well as effective listening and speaking skills in this and in all units as they further develop their personal and career goals and increase their interpersonal and employability skills. | 10 periods  450 minutes | (1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:  (A) identify and demonstrate work behaviors and qualities that enhance employability and job advancement such as regular attendance, attention to proper attire, maintenance of a clean and safe work environment, pride in work, flexibility, and initiative;  (B) employ effective verbal and nonverbal communication skills;  (C) employ effective reading and writing skills;  (D) solve problems and think critically;  (E) demonstrate leadership skills and function effectively as a team member;  (F) demonstrate an understanding of legal and ethical responsibilities in relation to the field of information technology; and  (G) demonstrate planning and time-management skills such as storyboarding and project management, including initiating, planning, executing, monitoring and controlling, and closing a project.  (2) The student identifies employment opportunities in the IT field with a focus in the area of digital media. The student is expected to:  (A) identify job opportunities and accompanying job duties and tasks;  (B) research careers of personal interest along with the education, job skills, and experience required to achieve personal career goals;  (C) demonstrate an understanding of the functions of resumes and portfolios; and  (D) create a digital portfolio. | |
| **Unit 2: Technology Skills in the 21st Century**  Students will engage in opportunities to develop skills in electronic communication and research into 21st Century technologies. Students will participate in group activities the enhance internet browsing skills, searching skills and utilization of web resources. Students will discuss and demonstrate knowledge of digital media and applications of digital media in utilization of appropriate software. | 10 periods  450 minutes | (3) The student uses emerging technologies to exchange and gather information and resources. The student is expected to:  (A) collaborate using various electronic technologies such as email, blogs, chat rooms, discussion threads, social media, podcasting, and wikis;  (B) demonstrate appropriate search strategies for finding resources or assets on the Internet;  (C) discuss recent digital media technologies; and  (D) evaluate and select appropriate software for the development of projects. | |
| **Unit 3: Copyright Ethics and Legal issues in Digital Media**  Student will engage in opportunities to develop skills in ethical procedures in digital media. Students will participate in group activities to enhance intellectual property law, copyright, trademarks, patents and violation of these laws. | 5 periods  225 minutes | (4) The student complies with standard practices and behaviors that meet legal and ethical responsibilities. The student is expected to:  (A) explain and demonstrate ethical use of technology and online resources;  (B) compare and contrast fair use, open source, and creative commons;  (C) adhere to intellectual property laws and regulations;  (D) differentiate between copyright and trademarks;  (E) explain the concept of intellectual property laws, including copyright, trademarks, and patents and consequences of violating each type of law;  (F) define and identify unethical practices such as hacking, online piracy, and data vandalism;  (G) demonstrate ethical use of Internet and online resources, including citation of source; and  (H) describe the function of a non-disclosure agreement and intellectual property agreement. | |
| **Unit 4: Principles and Elements of Design**  Students will engage in opportunities to develop concepts in the principles and elements of design. Students will participate in skilled and technical hands-on activities that will enhance the understanding and knowledge of eight principles of design and the eight elements of design. Students will synthesize and demonstrate knowledge of principles and elements of design by utilizing hands-on skills in application of these concepts. | 10 periods  450 minutes | (5) The student analyzes and applies design and layout principles in digital media. The student is expected to:  (A) compare and contrast printed and digital communications products that demonstrate appropriate and inappropriate use of design and layout principles;  (B) identify and apply perspective such as backgrounds, light, shades, shadows, and scale to capture a focal point and create depth;  (C) identify and apply principles of proportion, balance, variety, emphasis, harmony, symmetry, unity, and repetition in type, color, size, line thickness, shape, and space;  (D) identify and apply three-dimensional effects such as foreground, middle distance, and background images;  (E) identify and apply concepts of typography;  (F) identify and apply color theory; and  (G) create and improve digital products by applying the appropriate design and layout principles. | |
| **Unit 5: Fundamentals of Digital Imaging**  Students will engage in opportunities to develop concepts in digital imaging. Students will participate in skilled and technical hands-on activities that will enhance the understanding and knowledge of graphic files, saving conventions and outputs. Students will synthesize and demonstrate knowledge by saving and opening varying file types with the correct software application. | 10 periods  450 minutes | (6) The student designs and creates digital graphics. The student is expected to:  (A) compare and contrast the characteristics of raster-based bitmap graphics and vector-based graphics;  (B) create and modify digital graphics using appropriate vector-based and raster-based software following standard design principles;  (C) export and set graphics to be used in both print and digital formats;  (D) demonstrate knowledge of graphic resolution, file size, file formats, and file management;  (E) determine the type of data stored in a file based on its file extension and select appropriate software to modify, create, and view the file; and  (F) differentiate between the color mode selections in determining product output. | |
| **Unit 6: Software Technical Skills – Digital Photography**  Students will engage in opportunities to develop software skills in digital photography. Students will participate in skilled and technical activities that will enhance the use of digital photography while focusing on hands-on projects to develop introductory photography. Students will synthesize and demonstrate knowledge by utilizing hands-on skills to use digital cameras, digital lighting and introductory photo editing features. | 25 periods  1125 minutes | (7) The student demonstrates appropriate use of digital photography equipment and techniques. The student is expected to:  (A) demonstrate proper use of safety procedures while using digital photography equipment;  (B) capture still shot images using digital photography equipment incorporating various photo composition techniques such as lighting, perspective, candid versus posed, rule of thirds, and level of horizon;  (C) transfer still shot images from equipment to the computer; and  (D) demonstrate photographic enhancement techniques such as feathering, layering, masking, and color enhancement using appropriate photo editing software. | |
| **Unit 7: Software Technical Skills – Digital Video**  Students will engage in opportunities to develop software skills in digital video. Students will participate in skilled and technical activities that will enhance the use of digital video while focusing on hands-on projects to develop introductory video editing skills. Students will synthesize and demonstrate knowledge by utilizing hands-on skills to use digital video equipment, digital lighting and introductory video editing features. Students will create a digital video. | 25 periods  1125 minutes | (8) The student demonstrates appropriate use of video equipment and techniques. The student is expected to:  (A) demonstrate proper use of safety procedures while using digital video equipment;  (B) demonstrate proper use of terminology in relation to video technology;  (C) demonstrate proper ethics in the use of digital video photography equipment to capture video images;  (D) transfer video images from equipment to the computer;  (E) apply videographic enhancement and editing techniques such as panning, transitioning, zooming, content editing, and synchronizing audio and video using appropriate digital manipulation software; and  (F) export video files in digital formats to be used in various delivery systems such as podcasts, downloadable media, social media, and streaming video | |
| **Unit 8: Software Technical Skills – Digital Audio**  Students will engage in opportunities to develop software skills in digital audio. Students will participate in skilled and technical activities that will enhance the use of digital audio while focusing on hands-on projects to develop introductory audio editing skills. Students will synthesize and demonstrate knowledge by utilizing hands-on skills to use digital audio equipment, digital microphones and introductory audio editing features. Students will create a digital audio clip. | 20 periods  900 minutes | (9) The student demonstrates appropriate use of audio equipment and techniques. The student is expected to:  (A) demonstrate proper use of safety procedures while using digital audio equipment;  (B) demonstrate proper use of terminology and concepts in relation to audio technology;  (C) demonstrate proper use of digital audio equipment to capture audio files;  (D) transfer audio files from equipment to the computer;  (E) demonstrate proper use of audio editing software such as adding effects, fading, volume control, and manipulation of waveforms using appropriate digital manipulation software; and  (F) export audio files to be used in digital formats in various delivery systems such as podcasts, downloadable files, social media, and streaming video. | |
| **Unit 9: Software Technical Skills – Digital Animation**  Students will engage in opportunities to develop software skills in digital animation. Students will participate in skilled and technical activities that will enhance the use of digital animation while focusing on hands-on projects to develop introductory animation editing skills. Students will synthesize and demonstrate knowledge by utilizing hands-on skills to edit and create a 2D and 3D animation. | 25 periods  1125 minutes | (10) The student demonstrates appropriate use of animation. The student is expected to:  (A) plan and create a linear and non-linear animation using accepted standards such as design principles, frames and key frames, integration of audio into an animation, and user interactive controls;  (B) deploy animation to be used in various digital formats and on various video animation players; and  (C) create an interactive animation. | |
| **Unit 10: Software Technical Skills – Project Management**  Students will engage in opportunities to develop software skills in project management. Students will participate in skilled and technical activities that will enhance their skill in project management. Students will synthesize and demonstrate knowledge by utilizing hands-on skills to edit and create storyboards and plans for a final digital media project. | 15 periods  675 minutes | (11) The student demonstrates appropriate project management in the creation of digital media projects. The student is expected to:  (A) initiate a project, including identifying the purpose, audience, and audience needs for design plans;  (B) develop a plan for a media project such as a storyboard and stage development and identify equipment and resources;  (C) execute and monitor and control a project along its timeline and make suggested revisions until completion of the project; and  (D) close a project, including identifying lessons learned. | |
| **Unit 11: Software Technical Skills – Digital Media in Web Design**  Students will engage in opportunities to develop software skills in web design. Students will participate in skilled and technical activities that will enhance their skill in web design. Students will synthesize and demonstrate knowledge by utilizing hands-on skills to edit and create a web page that includes multiple digital media types. | 20 periods  900 minutes | (12) The student deploys digital media into print, web-based, and video products. The student is expected to:  (A) incorporate video, audio, text, graphics, and animations into a web page;  (B) incorporate various digital media products into an electronic document such as a newsletter, social media outlet, poster, or report; and  (C) incorporate various digital media products into an interactive product such as an animation, computer program, simulation, interactive website, or application. | |