



I CAN STATEMENTS

Digital Media

Unit 1 – Awareness of Digital Media Career Opportunities

I Cans:

- ❖ Develop career awareness related to working in the digital media industry.
 - ❖ Identify occupations related to digital media careers (graphic/commercial artist, project manager, technical writer, application programmer, video and sound specialist, and subject matter expert, instructional designers, art director, copy-writer, etc.)
 - ❖ Develop a realistic Student Education Occupation Plan (SEOP) using Career Pathways as a guide
 - ❖ Develop employability competencies/characteristics: responsibility, dependability, ethics, respect, and cooperation
 - ❖ Exhibit high standards of personal performance with a positive work ethic and attitude

Unit 2 – Common Computer Functions on a standard platform as they apply to Digital Media

I Cans:

- ❖ Implement problem solving skills
 - Consult with Teammates
 - Search software help menus
 - Utilize Internet searches
 - Utilize other appropriate sources
- ❖ Perform basic computer functions.
 - Utilize the *Clipboard*
 - Utilize shortcut keys and quick-stroke commands where applicable in software applications and OS to improve performance.
 - Convert and compress files using appropriate codec
 - Create back up files
 - Monitor file size and disk space
 - Utilize asset management using folders, naming conventions, etc.
- ❖ Understand and discuss the components of a basic digital media computer system and peripherals.
 - Identify, describe and use various input devices
 - Identify, describe and use various output devices
- ❖ Follow and adhere to the school's acceptable use policy (AUP).
 - Read and discuss the school's acceptable use policy
 - Follow and adhere to the school's acceptable use policy.
- ❖ Understand Fair Use Guidelines and Copyright Law
 - Understand Fair Use Guidelines as it applies to classroom use
 - Explain and justify appropriate application of Fair Use Guidelines
 - Understand ideas taken to create a tangible product have a copyright linked to the creator, or company, and the property
 - Understand the process of registering a copyright on intellectual property
 - Create a project using all original content, public domain, or licensed media, thereby adhering to all copyright laws and not involving Fair Use Guidelines

Unit 3 – Visual Design Concepts

I Cans:

- ❖ recognize and apply the following elements and principles:
 - Recognize and apply Shape (Shape is 2D) as it applies to: (line, value (contrast), texture, sizes, pace (positive and negative), color, emphasis, balance/alignment, unity, rhythm)
 - Recognize and apply Form (Form is 3D) as it applies to: (line, value (contrast), texture, sizes, pace (positive and negative), color, emphasis, balance/alignment, unity, rhythm)
- ❖ Color Theory — recognize and apply the following concepts:
 - Recognize and apply Color Properties (Hue, saturation, value)
 - Recognize and apply Color Schemes (complimentary, analogous, triadic, monochromatic)
 - Recognize and apply Symbolism/Emotion (warm, cool colors. What do different colors mean in different cultures?)
 - Recognize and apply Color depth/palettes (dithering)
 - Recognize and apply Color modes (RGB, CMYK, Grayscale)
- ❖ Image Composition— recognize and use the following concepts:
 - Recognize and use mergers, simplicity, leading lines, rule-of-thirds, point-of-view, field-of-view, and framing in image composition
 - Understand and apply resolution, anti-aliasing, lighting in image composition

Unit 4 – Text in Digital Media

I Cans:

- ❖ Typography — recognize and apply the following concepts:
 - Apply Font decisions (typeface/families, style/attributes, size)
 - Apply Typeface Design (serif, sans-serif, decorative, script)
 - Apply Text Layout Techniques (leading, kerning, tracking, alignment symmetric and asymmetric)
- ❖ Communication - demonstrate and use skills
 - Demonstrate oral communication skills
 - Demonstrate written communication skills
- ❖ Readability — Use text format to effectively communicate content
 - Utilize correct spelling and grammar
 - Utilize proper organization (Headings, indents, bullets, interface, navigation, etc.)

Unit 5 – 2D Graphics

I Cans:

- ❖ Create, manipulate and appropriately use *bitmap (raster)* graphics.
 - Identify graphic formats and their appropriate use (e.g., JPG, GIF, TIF, BMP, PSD, PNG, PDF, EPS, etc.)
 - Acquire image assets (scanning, digital camera, internet search, stock sources, etc)
 - Create images using a digital camera using appropriate settings
 - Utilize appropriate visual design and image composition techniques
 - Export/import images for project requirements (compression, resolution)
 - Crop, Resize, Straighten Image, Transform an image
 - Utilize techniques to effectively edit an image
 - Use Layers, Mask, and Selections
 - Apply Filters and Effects
 - Adjust color, contrast
 - Create Gradient
 - Apply Transparency

- Restore Images
- Utilize Color selection techniques
- Use Painting and drawing tools
- Use others – editing tools and techniques
- ❖ Create, manipulate and appropriately use vector graphics
 - Identify graphic formats and their appropriate use (e.g., PDF, AI, SWF, PNG, EPS, etc.)
 - Convert images from bitmap to vector and vice versa
 - Export/import images for project requirements (compression, resolution)
 - Utilize drawing tools to create and manipulate Paths (lines and Bezier Curves) using Anchor points, direction handles
 - Apply Stroke and Fill (solid and gradient)
 - Utilize appropriate selection tools
 - Perform grouping and ungrouping of objects
 - Apply Styles and Effects
 - Transform objects
 - Create Layers
 - Apply transparency
 - Utilize Text Tools
 - Others – This is not a comprehensive list

Unit 6 – Planning, Design, & Development

I Cans:

- ❖ Demonstrate proper planning and design by utilizing an instructional design model such as ADDIE, Adobe Professional Design, Rapid Deployment Model, and so forth in the development of *digital media projects*.
 - *Analyze* — gather and process contextual information affecting the goals, structure, purpose, content, audience, and design of a project.
 - *Design*— plan the general look and scope of the application and the media it will use, along with the budget, tools, objectives, outline content, storyboard, and schedule.
 - *Develop*— collect & create digital media content and testing of the application
 - *Implement*— publish the finished project and make it available to its audience.
 - *Evaluate* — assess the effectiveness of the project with the target audience and make adjustments in future revisions.
- ❖ Understand and use the Adobe professional design and development process
 - *Define* — Goals, target audience, content, and delivery requirements
 - *Structure* — Flowchart to portray the overall structure and screen views of the project
 - *Design* — design of comps, review with client, redesign from client feedback, and production storyboard
 - *Build and test* — project production based on storyboards, technical and usability testing, revision, and final project presentation
 - *Launch* – launch and publish project

Unit 7 – Team Activities

I Cans:

- ❖ Demonstrate the ability to work individually in the completion of digital media projects.
 - Demonstrate oral, written, and/or technological communication skills
 - Apply management skills in finding solutions to project problems
 - Demonstrate personal initiative in problem solutions
 - Complete projects according to specified deadlines
- ❖ Demonstrate the ability to work as a team member in the completion of digital media projects.

- Demonstrate oral, written, and/or technological communication skills
- Apply management skills in finding solutions to project problems
- Utilize organizational skills
- Demonstrate leadership ability
- Demonstrate willingness to compromise to meet team objectives
- Function as a responsible team member
- Describe the roles and responsibilities of members of a digital media team (i.e., project manager, programmer, graphic artist, audio/video specialist, subject matter expert (*SME*), animator, etc.)

Unit 8 – 2D Animation

I Cans:

- ❖ Create, manipulate and appropriately use animations.
 - Identify animation file formats and their appropriate use (e.g., MOV, SWF, GIF, FLA, WMV, m4v, etc.)
 - Perform changes to position, scale, color, and properties of an animated object
 - Utilize Timeline animation (Frame-by-frame, Tween)
 - Create Keyframe animation
 - Create Tween Animation (motion, shape, path)
 - Utilize Symbol/Instances
 - Use internal and external libraries
 - Import/Export assets
 - Publish/Packaging appropriately for delivery medium
- ❖ Effectively use animation techniques
 - Recognize and apply major principles of animation (squash and stretch, anticipation, timing, etc.) [see 12 principles of animation]
 - Effectively use storytelling techniques
 - Include appropriate audio

Unit 9 – Digital Video: plan, create, edit, and publish digital video.

I Cans:

- ❖ Plan Pre-Production of creating digital video
 - Utilize a script
 - Create a Budget
 - Create a storyboard
 - Build a shot plan
 - Create an asset list
 - Define necessary cast
 - Adhere to Fair Use for classroom projects and copyright for all student published work
 - Define team member roles
 - Organize "field shoot" and assign "field shoot" roles (Gaffer, Grip, Cameraman, Director, Anchor etc.)
- ❖ Use the Production stage creating digital video
 - Produce a Setup/cleanup list
 - Utilize appropriate video equipment (tripod, mic, lights, etc.)
 - Demonstrate proper shooting techniques (camera settings, composition, lighting, pov, fov, etc.)
 - Use a shot plan
- ❖ Use the Post-Production stage of creating digital video
 - Capture video (Downloading to computer)
 - Use appropriate codec and resolution settings
 - Define asset management processes (naming conventions, cataloging, storage, compression)

- Edit video (transitions, audio/video effects, titling (safe area), aspect ratio, credits, clips, etc.)
- Export for appropriate use CD-ROM, DVD, mobile device or Internet (compression settings, codecs, menus, etc.)
- Recognize and use appropriate video settings i.e.: resolution, Regional standards such as ATSC, NTSC, PAL (e.g., frame rates, frame size, compression, etc.)
- Identify video formats (e.g., HD, AVI, MOV, SWF, WMV, MP4, m4v, FLV, VOB, etc.) and broadcast formats
- Publish a digital video project

Unit 10 – Digital Audio

I Cans:

- ❖ Plan and create digital audio
 - Prepare a script and record digital audio
 - Capture sound from an original or existing source
 - Recognize and use appropriate types of sound (voice over/narration, music, sound effects)
- ❖ Edit digital audio
 - Edit sound
 - Apply special effects to audio files
 - Create audio envelopes
 - Manipulate pitch, sampling rate, amplitude
- ❖ Export and publish digital audio
 - Identify audio formats (e.g., WAV, MID, AU, MP3, AIF, RA, AAC, MP4, M4A, M4B, etc.)
 - Add appropriate metadata
 - Import, Export, and convert audio in different formats (Radio, CD quality)
 - Publish an audio project

Unit 11 – Web Technologies:

I Cans:

- ❖ Plan, create, edit, and publish a basic Web site.
 - Plan a basic Web site of multiple pages that includes digital media or links to digital media objects
 - Apply principles of good design in the Web site
 - Create the Web site with interactive links

Unit 12 – Digital Technologies

I Cans:

- ❖ Develop an awareness of digital and collaborative technologies
 - Explore emerging technologies
 - Share Bookmarking: save and share your best web content.(del.icio.us)
 - Utilize document sharing and collaborating
 - Discuss social networking, blogs, and Wikis in a digital media context
 - Explain various digital storage tools
 - Describe video conferencing, webinars, etc.
 - Describe podcasting, vodcasting and their relationship to RSS feeds

Unit 13 – Digital Portfolio

I Cans:

- ❖ Select my best work to create an digital archive that adheres to copyright and fair use guidelines and justify their choices.
 - Include 2D raster and vector digital graphics
 - Include Animation sequences
 - Include Digital video
 - Include Digital audio
- ❖ Output projects to an appropriate delivery medium
 - Determine if appropriate for Computer Based delivery (CB)
 - Determine if appropriate for Web Based delivery (WB)

- Determine if appropriate for deliver using DVD, Blue-Ray, MP3 Players, CD Players, portable digital devices, cell phones, etc.