

# Multimedia

## Foundational Concepts 1

- 1 Develop vocabulary related to multimedia 1.1
- 2 Investigate the key principles in internet safety, security, and privacy 1.2
- 3 Utilize hardware and software to manipulate various types of media (e.g., cameras, microphones, tablets, phones) 1.3
- 4 Demonstrate organizational skills to plan multimedia products (e.g., storyboarding, outlining, scripting, task delegation) 1.4
- 5 Apply design principles used in multimedia productions 1.5
- 6 Create text using typography principles 1.6
- 7 Evaluate and determine hardware and software required for multimedia use 1.7

## Foundations of Communication 2

- 1 Demonstrate ability to listen/read and follow directions 2.1
- 2 Demonstrate proofreading and spell check of written media 2.2
- 3 Demonstrate appropriate use of grammar within multimedia projects 2.3
- 4 Demonstrate ability to format written communications to include numbers and punctuation 2.4
- 5 Demonstrate ability to research and analyze information from various sources (i.e. written, digital) for use in written or oral presentation 2.5

## Media Files 3

- 1 Identify types of files used in multimedia applications (e.g., .gif, .jpg, .ai, .psd, .png, .avi, .wmv) 3.1
- 2 Develop electronic file management systems (project folders, file naming, etc.) 3.2
- 3 Upload and Download files from various sources (e.g., audio, images, video, animation) 3.3
- 4 Convert files to various formats (e.g., .flv to .avi, .mov to .wmv, .psd to .jpg) 3.4
- 5 Utilize file storage devices 3.5

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**6 Manage electronic file storage/transfer (online, network, Bluetooth, etc.)** 3.6

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**Electronic Presentations** 4

**1 Utilize a variety of presentation software (e.g., Prezi, PowerPoint, Apple Keynote, NXPowertlite, ect.)** 4.1

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**2 Identify components of effective electronic presentations** 4.2

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**3 Design linear and non-linear presentations (e.g., interactive game)** 4.3

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**4 Import files into a presentation (e.g., text, images, audio, video)** 4.4

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**5 Apply advanced editing techniques (e.g., build, effects, timing, animation, transitions)** 4.5

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**6 Export presentation to various formats (e.g., .ppt, .jpg, .html)** 4.6

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**7 Deliver a presentation using professional standards and techniques** 4.7

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**Managing Images** 5

**1 Acquire and import images from a variety of sources (e.g., scanners, online, cameras, phones)** 5.1

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**2 Apply appropriate resolution settings for intended use of image** 5.2

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**3 Apply appropriate image mode for intended application (e.g., convert RGB, CMYK, grayscale)** 5.3

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**4 Compose images using layers and selections** 5.4

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**5 Edit images (e.g., color, filter, tint, contrast, brightness)** 5.5

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**6 Manipulate images (e.g., mask, resize, crop, scale, group/ungroup, zoom, pan)** 5.6

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**7 Create original artwork using illustrative software** 5.7

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**Audio** 6

**1 Compare and contrast audio formats common size and quality (e.g., .mp3, mp4, .wav, .midi)** 6.1

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**2 Import and pull audio from a variety of sources (e.g., video, Internet, phone)** 6.2

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**3 Create original audio (e.g., voice, instrument)** 6.3

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**4 Edit audio (e.g., layering, trimming, level adjustments)** 6.4

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**5 Apply effects to audio (e.g., noise reduction, amplify, echo)** 6.5

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**6 Export audio files based on delivery method** 6.6

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## Video 7

- 1 Develop pre-production documents (e.g., storyboard, shot list) 7.1
- 2 Apply basic filming techniques (e.g., camera angles, camera movement, lighting, sound) 7.2
- 3 Access, capture, and import a variety of file sources (e.g. audio, video, graphics) 7.3
- 4 Arrange video clips, audio clips, titles and still images on timeline 7.4
- 5 Manipulate clips (e.g., link/unlink, adjust transparency, set properties, trim, adjust speed/duration) 7.5
- 6 Apply special effects, transitions, key frame/motion settings, animations, filters, and text 7.6
- 7 Synchronize audio with video 7.7
- 8 Apply advanced editing techniques (e.g., split screen format, chromakey) 7.8
- 9 Evaluate sources for playing completed video (e.g., hardware, software, web applications) 7.9
- 10 Apply codec (compression) appropriate for the media delivery 7.10
- 11 Export video for a variety of media outlets (e.g., broadcast, web) 7.11

## Animation 8

- 1 Create frame-by-frame animations 8.1
- 2 Create reusable symbols (e.g., button, movie, graphic) 8.2
- 3 Apply motion and shape tweens 8.3
- 4 Modify bitmaps (trace bitmap, convert to symbol) 8.4
- 5 Use layers and object modification techniques (e.g., transform, alpha transparency, filters) 8.5
- 6 Add interactivity to animations with buttons, menus, and scripting 8.6
- 7 Explore advanced animation techniques 8.7

## Emerging Technologies 9

- 1 Utilize and create collaborative electronic tools (e.g., wikis, blogs, forums) 9.1
- 2 Utilize web-based technologies to publish media (e.g., screencasts, podcasts, vodcasts, iTunes, ect.) 9.2
3. Utilize 3D animation techniques 9.3
- 4 Create games using various programs 9.4

**Workplace Readiness  
Skills** 10

- 1 Compare copyright and patent laws for multimedia between educational and workplace settings (e.g., video, text, sound, pictures)** 10.1

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- 2 Demonstrate ethical behavior when designing multimedia applications** 10.2

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- 3 Identify career/self-employment opportunities in multimedia production** 10.3

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- 4 Exhibit leadership skills through a student organization (e.g., FBLA, DECA)** 10.4

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- 5 Interact with industry professionals (e.g., guest speakers, field trips, job shadowing)** 10.5

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- 6 Use help tools (e.g., technical manual, on-line help, technical support)** 10.6

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- 7 Demonstrate mastery through work samples (e.g., portfolios, online portfolios, ect.)** 10.7

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- 8 Demonstrate ability to function as a team member** 10.8