

Digital Communications IV: Grades 10, 11, 12

Adopted 2010

Introduction to Video

1.1 Define terminology

1. Prepare a list of terms with definitions 1.1.1
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1.2 Discuss common video formats

1. Compare quality, size, compression, and platform compatibility of video formats: WMV, MPEG, MOV, VOB, MP4, ASF, FLV, AVI 1.2.1
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1.3 Discuss equipment and software needed for video production

1. Identify the purpose of basic video production equipment: camera, tripod, storage media, lights, chroma key backdrop, firewire, USB, power source, and tripod dolly 1.3.1
 2. Compare and contrast video editing, DVD authoring, and video conversion software 1.3.2
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1.4 Review the copyright laws that affect the use of video

1. Analyze and critique acceptable sources of video for digital media productions, i.e. royalty free, original works, etc. 1.4.1
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1.5 Discuss the phases of production

1. Identify the phases of production: preproduction, production, post production 1.5.1
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Video Pre- Production/Production

2.1 Define terminology

1. Prepare a list of terms with definitions 2.1.1
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2.2 Explain the basic parts/features/settings of a video camera and related devices

1. Label the basic parts of the video camera 2.2.1
2. Explore the camera settings 2.2.2

2.3 Identify the basic camera shots and technique

1. Demonstrate basic video camera techniques, such as panning, tilting, zooming, backlight, white balance [2.3.1](#)
2. Demonstrate basic camera shots such as over the shoulder, low angle, high angle, eye level, birds eye, long shot, mid shot, close up shot, extreme close up shot, establishing shot, and closing shot [2.3.2](#)
3. Record a video clip for stock footage (nature, sports, student life, etc.) [2.3.3](#)

2.4 Discuss the steps and techniques involved in preproduction

1. Create a storyboard that includes the following: sketches, shots, camera angles, props, setting, characters, lighting, needed equipment [2.4.1](#)
2. Create a script for a video [2.4.2](#)
3. Select appropriate equipment and prepare equipment for recording [2.4.3](#)

2.5 Discuss the techniques involved in production

1. Analyze and adjust the appropriate settings for shooting video, i.e. lighting, audio, environment, etc. [2.5.1](#)
2. Record footage based on storyboard [2.5.2](#)

Video Post-Production

3.1 Discuss appropriate file settings

1. Specify the appropriate file settings for creating video: frame size, frames per second, aspect ratio, file compression, broadcast standards, and sound settings [3.1.1](#)

3.2 Discuss the concepts of video capture

1. Import or capture footage into a video project [3.2.1](#)
2. Discuss hardware/software compatibility issues [3.2.2](#)
3. Use conversion software to change video format [3.2.3](#)

3.3 Identify the different elements used in creating a video

1. Analyze text elements used in video production: titles, title overlay, lower thirds, rolling credits, templates [3.3.1](#)
2. Analyze basic elements of video: still images, footage, audio, transition [3.3.2](#)
3. Create a video applying the basic elements of video [3.3.3](#)
4. Analyze advanced elements of video: chroma key, B-roll (cut away), nat sounds, voice over, superimpose, video effects, sound bite, establishing shot [3.3.4](#)
5. Create a video applying the advanced elements of video [3.3.5](#)

3.4 Discuss options for exporting video

1. Export a video project to a movie file format [3.4.1](#)
 2. Export a video project appropriate for the web or mobile device [3.4.2](#)
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3.5 Discuss DVD authoring software

1. Discuss terms related to DVD authoring software such as menus, chapters, scenes, templates [3.5.1](#)
 2. Create a DVD using DVD authoring software [3.5.2](#)
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Integration

4.1 Integrate the basic elements of media into a digital media production

1. Create a project incorporating the basic elements of media [4.1.1](#)
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Current and Emerging Technologies

5.1 Define terminology

1. Prepare a list of terms with definitions [5.1.1](#)
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5.2 Explain/discuss podcasting/vodcasting

1. Identify the types of podcasting, i.e. video, audio [5.2.1](#)
 2. Explain the uses of podcasting, i.e. interviews, storytelling, tutorials, directions, commentaries, etc. [5.2.2](#)
 3. Describe the software used for creating podcasts, i.e. audio, video, video screen capture, RSS [5.2.3](#)
 4. Describe the steps for creating podcasts [5.2.4](#)
 5. Create and publish a podcast [5.2.5](#)
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5.3 Discuss gaming development

1. Examine the techniques for creating games, i.e. writing code or using game [5.3.1](#)
 2. Create a game [5.3.2](#)
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5.4 Discuss current online communication/collaboration tools from a business

1. Examine tools such as online interactive whiteboards, Wikis, blogs, RSS feeds, social networking sites, etc. [5.4.1](#)
 2. Incorporate an online communication/collaboration tool into a project [5.4.2](#)
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5.5 Discuss the development of applications (apps) for various methods of delivery

1. Create applications for mobile devices, interactive whiteboards, etc. [5.5.1](#)