

Objective 206

Apply production methods to plan and create advanced digital media video projects.



Course Weight : 20%



ExplorNet CareerTech

from The Centers for Quality Teaching and Learning





Objective 206 - Video

Objectives are broken down into three sub-objectives : pre-production, production, and post-production. **Click the blue text for each sub-objective to jump to that particular part of the presentation.** The course weight for each sub-objective is written in green.

206.01 - Understand advanced **pre-production**
(8%) methods for digital video.

206.02 - Understand advanced **production**
(6%) methods for digital video.

206.03 - Understand advanced **post-production**
(6%) methods for digital video.



206.01

Course Weight : (8%)

Understand advanced
pre-production methods
for digital video.

meeting with the client to make preliminary decisions about the video production; writing a script and designing a storyboard; choosing appropriate hardware



Meet with the client to create a **project plan** :

- ✓ Determine the **purpose** of the video production
- ✓ Define a **target audience**
- ✓ Set overall **goals** of the video
- ✓ Agree on **deadlines** for phases of the project
- ✓ Create a **budget** for the production
- ✓ Decide what **equipment** will be necessary to create the video project

Script Writing :

Whether the video project is a commercial, news story, drama, or live production, a script is needed to tell the actors (both on screen and for a voiceover) what to say and when. For a video production, the script could also give direction to set lighting, sound effects, and other components of the project.

When writing the script, it is important to **consider the following** :

- ✓ The **overall goals** of the video project
- ✓ The **target audience**
- ✓ The accepted **vernacular** of the target audience
- ✓ The **readers** (performers) of the script



Generate a **storyboard** to give the client a visual representation of ideas :

- ✓ **Sketch out a visual representation** of each major scene or major phase of the video project
- ✓ Provide the client with information about the **audio sources, camera movements, and transitions**

Create a **shot list** in the sequence of the storyboard for the camera operators

Get any actors or other on-camera participants to sign a **talent release document**

Gather and manage information and digital assets provided by the client :

- ✓ **Create a file-naming convention** to assure proper organization and storage
- ✓ Save and **organize files** for easy and quick access

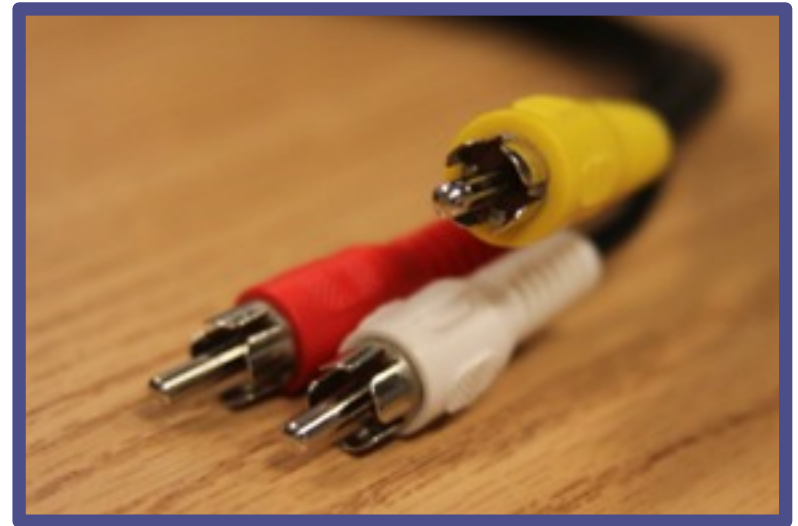
Choose appropriate camera(s), microphone(s), cables, and other equipment needed for production.

A description of different video cable types and other equipment are listed on the following slides.



Video Cable Types

- Composite (RCA) Cable
 - ✓ very common video (and audio) cable used in professional and consumer settings alike
 - ✓ color coded system makes it easy to distinguish between audio and video plugs
 - ✓ used for VCRs, DVD players, and other basic video connections



Video Cable Types (continued)

- Component (RGB or YP_bP_r) Cable

- ✓ red, blue, and green color coded connectors
- ✓ carries high-definition video signals only (no audio)
- ✓ splits video signal into three parts to provide higher detail and color accuracy



Video Cable Types (continued)

- Coaxial (F) Cable
 - ✓ commonly used to carry a transmitted video signal (cable TV, antenna, etc.)
 - ✓ highly shielded cable that can span long distances without signal loss
 - ✓ carries audio and video



Video Cable Types (continued)

- BNC Cable

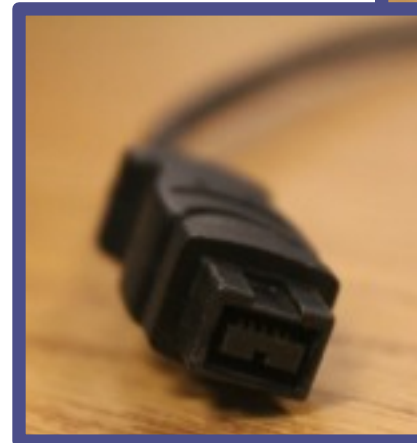
- ✓ commonly used in the professional setting
- ✓ typically used to connect video camera to switcher
- ✓ features a two-pin locking system to keep it from being unplugged accidentally



Video Cable Types (continued)

- Firewire Cable

- ✓ high transfer speed digital cable used with computers
- ✓ commonly used to capture audio or video from the recording device into the computer
- ✓ depending on age of equipment, can be Firewire 400, 800, or 4-pin



Firewire 800
(9-pin)



Firewire 4-pin

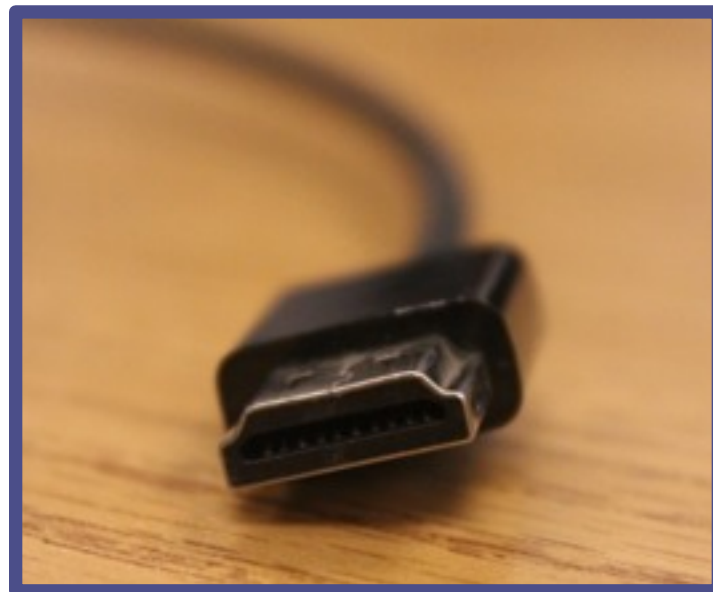


Firewire 400
(6-pin)

Video Cable Types (continued)

- HDMI Cable

- ✓ high-definition video cable
- ✓ carries digital audio and video
- ✓ combines audio and video signals into one cable to simplify connection



Video Production Equipment

- Video Switcher

- ✓ mostly used for live video productions
- ✓ accepts multiple camera sources and combines them into one production
- ✓ can automatically add transitions and effects to the input sources



206.02

Course Weight : (6%)

Understand advanced
production methods
for digital video.

gathering footage and other assets for the video project using a camera on a production set

Advanced Video Production Terms

In video production, **the production phase consists only of recording footage with a camera (no editing)**. Basic concepts of video camera operation were covered in Digital Media (Level 1).

In order to best meet the needs of the client and to convey the intended message of a video production to the audience most efficiently, more advanced terminology about recording video are necessary.

These new terms and camera techniques can be broken down into four main categories : **audio, set lighting, camera lenses, and composition.**

Advanced Audio Terms

- **Natural Sound (Room Tone)**

using the actual sounds of the environment in which the video takes place; typically used to make the video seem more realistic

- **Recorded Narration (Voiceover)**

dialogue added to a video production to explain the visual scenario and give the audience more information about what is happening in the video

Advanced Set Lighting Terms

- **Key Light**

the main source of light for the video production; pointed at the set to illuminate the subject(s)

- **Fill Light**

a less intense light used to eliminate or soften the shadows of the subject(s) in a video production

- **Back Light**

used to illuminate the subject(s) of a video production from behind; separates the subject(s) from the background itself

Advanced Camera Lens Terms

- Telephoto Lens

has a longer focal length than a standard lens; provides a more magnified image and narrower field of view; used for far away subject(s)

- Macro Lens

a lens suitable for unusually up-close filming of the subject(s); shows a particular part of the subject in extreme detail

- Fisheye Lens

a wide-angle lens that has a field of vision covering 180°; creates a circular image with visual distortion around the edges for visual effect

- Aperture

the hole in the lens by which light travels through to re-create the image being filmed; size of the hole is controlled by the iris

Advanced Composition Terms

- **Establishing Shot**
sets up a context for the scene by showing the relationship between the subject(s) and their environment
- **Extreme Wide Shot**
used to show the subject and its environment from further back than a typical wide shot
- **Extreme Close-Up Shot**
shows a particular part of a subject with extreme detail

The majority of camera composition techniques - wide shot, medium shot, canted shot, etc. - are discussed in the 106.02 presentation (Level 1).

Advanced Composition Terms (continued)

- **Take**

a sequence of a video production that is recorded continuously, at one time; some scenes may require several takes to complete correctly

- **Depth of Field**

the distance between the nearest and furthest objects in a scene that remain in focus

- **Field of View**

the area that is visible through the camera lens

- **B-Roll**

supplemental or alternate footage that is mixed intermittently with the main shot during a video production

206.03

Course Weight : (6%)

Understand advanced
post-production methods
for digital video.

editing the original video footage in a software program; optimizing the output video file based on specific client needs



Advanced Video Editing Terms

Basic concepts of digital video editing techniques were covered in Digital Media (Level 1).

In order to best meet the needs of the client and to accomplish the purpose of the video project, more advanced terminology and editing techniques are necessary.

These new terms and techniques can be broken down into four main categories : **titles**, **transitions**, **timeline**, and **video effects**.

Advanced Title Terms

- Still Title

a title (block of text with or without an accompanying graphic) that appears on the screen, remains motionless, and then disappears

- Roll Title

a title that appears from either the top or the bottom of the screen and moves vertically through the field of view and off the other side

- Crawl Title

a title that appears from either the left or the right of the screen and moves horizontally through the field of view and off the other side

- Superimposition (Super or Lower Third)

a title that relays information about the subject to the audience (their name, position or title, statistics, etc.); usually appears in the lower third of the screen



Advanced Transition Terms

- **Transition**
changing from one video clip to another in a video production
- **Cut**
a instantaneous transition from one video clip to the next
- **Dissolve**
a gradual blend between one video clip and another, from a video clip into a black or white screen, or from a black or white screen into a video clip
- **Wipe**
when one video clip replaces another by traveling from one side of the frame to the other or through a shape

Advanced Timeline Terms

- Assembly Cut

when the raw video clips from a production are arranged into the proper sequence inside the project's timeline

- Rough Cut

when the video clips are edited down using the correct in and out points, and initial transitions or special effects are added

- Final Cut

when all of the transitions, special effects, and other editing techniques are completely finished; step directly preceding rendering and exporting

- Nested Sequence

embedding multiple sequences of edited clips into a master composition to ease the overall editing and compositing process

Advanced Video Effects Terms

- **Compositing**

combining several layers video and/or image sources together to create a final composition

- **Chroma Keying (“Green-Screening”)**

recording a video clip in front of a solid color background, then using a video editor to replace the background with another source

- **Masking**

similar to masking in graphics and animation; showing or hiding specific area(s) of a video clip

- **Rotoscoping**

masking an object in a video as it moves within the field of view

Render the video production

- ✓ Assures all of the transitions and special effects added to the video production are smooth and visually appealing
- ✓ Speeds up the export process

Export the finalized video

- ✓ This process uses a **codec** to save the video in a portable format to be viewed on other computers
- ✓ In order for the client or other audience to view the video, they must have the same codec on their computer



Re-design the video production on client feedback (if necessary)

Preview the final version

- ✓ Render the video and re-export after addressing feedback
- ✓ Watch the exported video in its entirety to check for **quality assurance**

Optimize the video file based on specific client needs

- ✓ File format requirements
- ✓ Codec requirements
- ✓ File size requirements

