

Objective 106.02

Understand digital video production methods, software, and hardware.



Course Weight : 15%



ExplorNet CareerTech

from The Centers for Quality Teaching and Learning





Video Production Methods

Three Phases for Producing Digital Video :

1. Pre-Production

define parameters of the project and make preliminary decisions

2. Production

use a camera to collect footage

3. Post-Production

*edit the footage to convey the intended message to the audience;
optimize the video file for specific client needs*



1. Pre-Production

- ✓ Determine the overall **purpose** of the project
- ✓ Define the intended **target audience**
- ✓ Use a **storyboard** to determine sequence of events in the video and provide client with a visual representation of ideas
- ✓ Consult with the client to **write a script** that effectively conveys the intended message



1. Pre-Production (continued)

- ✓ Determine specific **hardware** needs
 - Computer
 - Video Camera(s)
 - Microphone to Capture Audio
 - Tripod to Steady Camera Shots
 - Lights (if necessary)



1. Pre-Production (continued)

✓ Determine specific **software** needs

- **Video Editing Software**

captures video from the camera media and imports into the editing software

manipulates video footage and adds the desired effects to convey the intended message



2. Production

- ✓ **Setup equipment** such as tripods, cameras, and lighting
- ✓ **Record footage** according to the storyboard
- ✓ **Save** and organize recorded video



2. Production (continued)

Frame Composition Terms :

- Rule of Thirds

mentally dividing the frame into thirds both horizontally and vertically (similar to a tic-tac-toe board); subject should occupy two-thirds of the frame

- Wide Shot

shows subject and location/environment in its entirety
(*ex : framing a subject from head to toe*)

- Medium Shot

shows a part of the subject with more detail while still giving an impression of the location/environment
(*ex : framing a subject from waist up*)



2. Production (continued)

Frame Composition Terms : (continued)

- Close-Up Shot

shows a particular part of a subject with more detail
(ex: framing a subject from shoulders up)

- High Angle Shot

when camera location is above normal eye-level compared to the subject
(makes the subject appear small, weak, inferior, or scared)

- Low Angle Shot

when camera location is below normal eye-level compared to the subject
(makes the subject appear tall, powerful, dominating, or scary)



2. Production (continued)

Camera Movements :

- Zoom

uses the mechanics of the camera's lens to make the subject appear closer or further away; physical location of the camera does not change

- Pan

horizontally pivoting the camera left or right; physical location of the camera does not change

- Tilt

vertically pivoting the camera up or down; physical location of the camera does not change



2. Production (continued)

Camera Movements : (continued)

- **Dolly**
the camera physically moves toward or away from the subject to make it appear closer or further away
- **Truck**
the camera physically moves horizontally (left or right)
- **Crane**
the camera physically moves vertically (up or down)



2. Production (continued)

Camera Operation Terms :

- Focus

adjusting the camera's lens settings to make the footage of the subject clear and not blurry

- White Balance

adjusting the camera's color settings to match true white; results in all other colors becoming balanced

- Iris

adjust the camera's lens settings to allow the appropriate amount of light into the camera

** some cameras adjust these three properties automatically while shooting*



3. Post-Production

- ✓ **Import recorded footage** into the video editing software **or gather existing footage** from outside sources
- ✓ **Select, edit, and assemble the video clips** according to the storyboard
- ✓ **Adjust audio levels, add titles, add transitions** to the video clips to convey the intended message to the audience



3. Post-Production (continued)

Optimize and export the video output file for specific client needs, including :

- ✓ Primary use of video production
- ✓ File size requirements
- ✓ File format requirements



3. Post-Production (continued)

Common Video File Formats :

.MOV

- uses the Quicktime® player for video playback
- standard video format for Apple® computers

.AVI

- standard video format for Microsoft® PCs

.WMV

- uses the Windows® Media Player for video playback
- Microsoft® file format used for streaming on the Internet



3. Post-Production (continued)

Common Video File Formats :

.FLV

- uses the Adobe® Flash Player for video playback
- commonly used for embedding videos on the Internet

.MPEG-2

- format used for DVDs

.MPEG-4

- format used for Blu-Ray Discs (better quality than MPEG-2)
- standard for streaming videos over the Internet

