

Unit III - The Video Camera

Content Area: **Technology**
Course(s): **Video Production I**
Time Period: **3 weeks**
Length: **Weeks**
Status: **Published**

Unit Overview

The students will learn how the Video Camera works and the equipment needed to operate it.

Transfer

Students will be able to independently use their learning to...

- Types of Cameras
- Parts of the Camera
- Mounting the Camera
- Camera Care
- Basic Rules of composition
- White Balancing
- Depth of field
- Camera Movements

Meaning

Understandings

After completing this unit, students will be able to:

- Explain the difference between the various video cameras available
- Identify each part of a video camera and note the corresponding function.
- Differentiate between the focal length and the focal point related to a zoom lens.
- Explain the interrelationship between f-stop, the iris, and aperture in controlling light.
- Understand how the white balancing a camera affects the picture.
- Summarize how the depth of field contributes to composing a good picture.
- Identify the composition of each type of camera shots.
- Illustrate a variety of camera movements.
- Explain how a videographer can psychologically and physically affect the audience.

Essential Questions

- How do I use a video camera?
- What do I use to make my shot look professional?
- How do I control the amount of light going in to the video camera?
- What does White Balancing a camera do?
- Why does my shot not look like what I see on TV?
- Moving the camera and tripod is called....

Application of Knowledge and Skill

Students will know...

Students will know...

- How to explain the difference between the various video cameras available
- How to identify each part of a video camera and note the corresponding function.
- How to differentiate between the focal length and the focal point related to a zoom lens
- How to explain the interrelationship between f-stop, the iris, and aperture in controlling light.
- How to understand how the white balancing a camera affects the picture.
- How to summarize how the depth of field contributes to composing a good picture.
- How to identify the composition of each type of camera shots.
- How to illustrate a variety of camera movements.
- Explain how a videographer can psychologically and physically affect the audience.

Students will be skilled at...

Students will be skilled at...

- Identifying the parts of a video camera.

- Perform basic functions on a video camera.
- Differentiate between the focal length and focal point related to a zoom lens
- Explain the interrelationship between f-stop, the iris, and aperture in a controlled light environment.
- Setting the White Balance of the camera.
- Composing a good shot
- Using the correct terminology to move the camera.

Academic Vocabulary

aperture
 auto-focus
 auto-iris circuit
 camcorder
 camera control unit
 camera head
 charge coupled device
 convertible camera
 diopter adjustment
 dolly
 drag
 fast lens
 fluid head
 focal length
 focal point
 focus
 friction head
 f-stop
 gain
 hot
 iris
 jib
 lens
 optical center
 pan handle
 pedestal column
 pedestal control
 remote control unit
 shutter
 slow lens
 studio camera
 studio pedestal
 subjective camera
 target
 tighten
 tripod
 tripod head
 variable focal length lens
 viewfinder

widen
zebra stripes
zoom in
zoom lens
zoom lenses
zoom out

arc
arc left
arc right
bust shot
close-up
depth of field
dolly
dolly in
dolly out
establishing shot
extreme close-up
extreme long shot
four shot
great depth of field
group shot
head room
high angle shot
knee shot
lead room
long shot
low angle shot
macro
medium close-up
medium long shot
medium shot
mid shot
minimum object distance
narrow angle shot
nose room
over-the-shoulder shot
pan
pan left
pan right
pedestal
pedestal down
pedestal up
pre-focus
profile shot
pull focus
rack focus
reaction shot
rule of thirds
selective depth of field
shallow depth of field
shot

shot sheet
three shot
tilt
tilt down
tilt up
truck
truck left
truck right
two shot
white balance
wide angle shot

Learning Goal 1

Students will understand the parts and the functions of a video camera.

Target 1

Students will be able to identify the parts of a Video Camera.

Target 2

Students will be able to understand what the functions of a video camera are.

Learning Goal 2

Student will differentiate between the focal length and focal point related to a zoom lens.

Target 1

Students will be able to explain the focal length and be able to demonstrate different focusing techniques.

Target 2

Students will be able to explain the zoom lens works and demonstrate techniques on how to use the zoom lens.

Learning Goal 3

Students will be able to explain how to compose a good shot, move the camera with the proper terms, and how White Balancing can effect the picture.

Target 1

Students will be able to explain how to compose a good shot, and be able to point out when a shots composition is wrong.

Target 2

Students will be able to explain and demonstrate the camera movement terms by using them to move the camera.

Target 3

Students will be able to explain why and how to proper White Balance a camera shot.

Summative Assessment

Written/Performance Assessment

21st Century Life and Careers

CRP.K-12.CRP1

Act as a responsible and contributing citizen and employee.

CRP.K-12.CRP2

Apply appropriate academic and technical skills.

CRP.K-12.CRP4	Communicate clearly and effectively and with reason.
CRP.K-12.CRP6	Demonstrate creativity and innovation.
CRP.K-12.CRP7	Employ valid and reliable research strategies.
CRP.K-12.CRP8	Utilize critical thinking to make sense of problems and persevere in solving them.
CRP.K-12.CRP9	Model integrity, ethical leadership and effective management.
CRP.K-12.CRP10	Plan education and career paths aligned to personal goals.
CRP.K-12.CRP11	Use technology to enhance productivity.
CRP.K-12.CRP12	Work productively in teams while using cultural global competence.

Formative Assessment and Performance Opportunities

Written Assessment

Performance Assessment

Accommodations/Modifications

Multiple charts and diagram handouts of the cameras, lenses, and accessories

Online videos of the parts of a camera and their uses

Enrichment opportunities: Video assistance outside the classroom

Differentiation: 504 accommodations and IEP modifications

Unit Resources

Television Production & Broadcast Journalism Text Book

Television Production & Broadcast Journalism Workbook

TV Studio Camera