



TELEVISION BROADCASTING

Television Broadcasting 2

This course is designed to provide students with the advanced knowledge and skills related to the television broadcasting industry. Includes instruction and hands-on assignments in the following areas: Camera operation, audio systems, lighting systems, pre-production, studio operations, control room operations, visual effects and graphics, and copyright laws.

**Utah State Office of Education
Career & Technical Education**

TELEVISION BROADCASTING 2

Levels:	Grades 11-12
Credit:	Minimum 0.5 credit
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Test #:	591
License:	CTE/Secondary
Endorsement:	Television Broadcasting
Prerequisite:	Television Broadcasting 1

COURSE DESCRIPTION

This course is designed to provide students with the advanced knowledge and skills related to the television broadcasting industry. Includes instruction and hands-on assignments in the following areas: Camera operation, audio systems, lighting systems, pre-production, studio operations, control room operations, visual effects and graphics, and copyright laws.

CORE STANDARDS, OBJECTIVES, AND INDICATORS

STANDARD 1

Students will be able to understand and demonstrate the correct operation of the camera.

Objective 1: Basic parts of a camera

- a. CCD/CMOS
- b. Lens
- c. Body
- d. Viewfinder.

Objective 2: Camera movements

- a. Pan
- b. Truck
- c. Dolly
- d. Arc
- e. Pedestal
- f. Tilt

Objective 3: Picture composition

- a. Rule of thirds
- b. Nose room
- c. Headroom
- d. Lead room.

Objective 4: Shot selections

- a. Wide or long (LS)
- b. Medium (MS)
- c. Close up (CU)
- d. Extreme close up (ECU)
- e. Over-the-shoulder (O/S)
- f. Cross shot (XS)

Objective 5: Camera operation

- a. Focus
- b. White balance

- c. Setting the iris
- d. Depth of field

Objective 6: Camera Support

- a. Tripod
- b. Hand Held

Objective 7: Teleprompter

STANDARD 2

Students will be able to understand and demonstrate audio systems and how they are used.

Objective 1: Microphones

- a. Pickup patterns
 - Omnidirectional
 - Unidirectional
 - Bidirectional
 - Hypercardioid
 - Cardioid
- b. Transducers
 - Dynamic (no battery)
 - Condenser (battery)
 - Ribbon
- c. Microphone types
 - Lavalier
 - Hand (stick)
 - Shotgun/Boom
 - Camera
- d. Connectors
 - BNC
 - Firewire
 - HDMI
 - Mini (1/8")
 - Stereo/ mono
 - Phone (1/4")
 - Stereo/mono
 - RCA
 - USB
 - XLR
- e. Filters
 - Pop
 - Wind Screen
 - Wind Sock
- f. Cables
 - Balanced (three wire)
 - Unbalanced (two wire)

Objective 2: Audio Mixer parts

- a. Mic/line Inputs
- b. Mic/line faders
- c. VU Meter

- d. Master Fader
- e. Line Out

Objective 3: Audio Mixer Functions

- a. Volume Control
- b. Combining several inputs into a composite output
- c. Boost microphone level to line level

STANDARD 3

Students will be able to understand and demonstrate lighting systems and how they are used.

Objective 1: Principles of Lighting

- a. Triangle or three-point lighting
- b. Key (Spot)
- c. Back or Halo (Spot)
- d. Fill (Flood)
- e. Form, dimension and mood

Objective 2: Lighting instruments and accessories

- a. Spot (direct)
- b. Fresnel (direct)
- c. Flood (diffused)
- d. Filters
- e. Reflectors
- f. Barn doors
- g. Quartz lamps

Objective 3: Lighting

- a. Base lighting
- b. Light measurement (lux and footcandles)
- c. Color temperature (Kelvin)
 - Outdoor 5600°K
 - Indoor 3200°K
- d. Chroma key
- e. Gels
- f. Situation Lighting
- g. Background
- h. Falloff
- i. Silhouette

STANDARD 4

Students will be able to understand and demonstrate preproduction.

Objective 1: Preproduction meeting

Objective 2: Script

Objective 3: Rundown

Objective 4: Studio preparation

STANDARD 5

Students will be able to understand and demonstrate studio operation.

Objective 1: Crew responsibilities

- a. Producer
- b. Director
- c. Technical director
- d. Floor director
- e. Camera operator
- f. Audio
- g. Video playback
- h. Graphics
- i. Talent

Objective 2: Media Management

- a. Labeling
- b. Archiving

Objective 3: Post Production Evaluation

STANDARD 6

Students will be able to understand and demonstrate control room operation.

Objective 1: Crew responsibilities

- a. Producer
- b. Director
- c. Technical director
- d. Audio
- e. Video playback
- f. Graphics
- g. Teleprompter
- h. Still Store

Objective 2: Production Switcher Parts

- a. Preview Bus
- b. Program Bus
- c. Key Bus
- d. Mix/Effects (M/E)
- e. Fader Bar

Objective 3: Production Switcher Functions

- a. Select video source
- b. Transitions
- c. Special Effects

STANDARD 7

Students will be able to understand and demonstrate visual effects and graphics.

Objective 1: Visual effects

- a. Chroma key
- b. Picture in Picture (PIP)
- c. Virtual Studio
- d. Transitions

Objective 2: Graphics

- a. Text
- b. Fonts
- c. Colors (readability and contrast)
- d. Title safe area
- e. Computer-generated design
- f. Still images
- g. Lower third

STANDARD 8

Students will be able to understand and demonstrate news gathering (ENG).

Objective 1: News Package

- a. A roll (Sound bites)
- b. B roll
- c. Cut-aways
- d. Reporter Stand-Up
- e. Scripting
- f. Logging (verbatim)

Objective 2: Editing

STANDARD 9

Students will be able to understand and demonstrate knowledge of television standards.

Objective 1: NTSC

Objective 2: PAL

Objective 3: High definition (720p, 1080i) vs Standard definition

Objective 4: Aspect ratio

Objective 5: Frames per second (fps)

Objective 6: Interlaced

Objective 7: Progressive

STANDARD 10

Students will be able to understand and practice copyright laws, ethics and legal issues dealing with photography as identified in United States Code Title 17 Chapter 1 Section 101.

Objective 1: Define copyright

Objective 2: Other definitions

- a. Audiovisual works
- b. Computer program
- c. Copies
- d. Copyright owner
- e. Digital transmission
- f. Financial gain
- g. Pictorial, graphic, and sculptural works
- h. Work of visual art

Objective 3: Students will practice ethics and rules governing photojournalism (i.e. Editorial content must not be changed)

Objective 4: Students will practice correct usage of copyright laws (i.e. the right to reproduce, manipulate, distribute, plagiarize or exhibit another photographer's work outside of fair use provisions)

- a. Time limitations
- b. Portion limitations
- c. Text material
- d. Illustrations and photographs
- e. Copying and distribution limitations

Objective 5: Students will demonstrate understanding of ethics related to social and legal issues in subject choice (i.e. model releases, image appropriateness, and cultural sensitivity)

STANDARD 11

Students will enhance their understanding of Television Broadcasting as a profession and will develop professional skills for the workplace.

Objective 1: As a participating member of the SkillsUSA student organization, complete the SkillsUSA Level 2 Professional Development Program.

- a. Measure/modify short-term goals.
- b. Identify stress sources.
- c. Select characteristics of a positive image.
- d. Demonstrate Government awareness.
- e. Demonstrate awareness of professional organizations.
- f. Apply team skills to a group project.
- g. Observe and critique team skills at a local professional meeting.
- h. Demonstrate business meeting skills.
- i. Explore workplace ethics: codes of conduct.
- j. Demonstrate social etiquette.
- k. Complete survey for employment opportunities.
- l. Review a professional journal and develop a three- to five-minute speech.
- m. Complete a job application.
- n. Assemble an employment portfolio.
- o. Explore supervisory and management roles in an organization.
- p. Conduct a worker interview.

- q. Perform a self-evaluation of proficiency in program competencies.

Objective 2: Serve in the school's SkillsUSA chapter as a committee member.

Objective 3: Display a professional attitude toward the instructor and peers.

Objective 4: As a participating member of the SkillsUSA student organization, complete the SkillsUSA Level 3 Professional Development Program.

- a. Evaluate your career and training goals.
- b. Market your career choice.
- c. Develop personal financial skills
- d. Serve as a volunteer in the community.
- e. Plan and develop a business.
- f. Conduct a worker interview.
- g. Develop a résumé and write a cover letter.
- h. Demonstrate interviewing skills.
- i. Understand the cost of customer service.
- j. Identify and apply conflict resolution skills.
- k. Demonstrate evaluation skills.
- l. Examine workplace ethics: the role of values in making decisions.
- m. Perform a skill demonstration.
- n. Learn what is contained in Material Safety Data Sheets (MSDS).
- o. Perform a self-evaluation of proficiency in program competencies.

Objective 5: Serve as an officer in the school's chapter of SkillsUSA

Objective 6: Participate in an authorized SkillsUSA drafting competition.

Objective 7: Display a professional attitude toward the instructor and peers.

* SkillsUSA PDP requirements - recommended