

STRANDS AND STANDARDS

TELEVISION BROADCASTING 1



Course Description

This course is designed to provide students with the basic 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.

Intended Grade Level	10-12
Units of Credit	0.5
Core Code	40.01.00.00.005
Concurrent Enrollment Core Code	N/A
Prerequisite	None
Skill Certification Test Number	590
Test Weight	0.5
License Type	CTE and/or Secondary Education 6-12
Required Endorsement(s)	
Endorsement 1	Television Broadcasting
Endorsement 2	N/A
Endorsement 3	N/A



STRAND 1

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

Standard 1

Identify the basic functions of the main parts of a camera, including:

- Image sensors
- Lens
- Body
- Viewfinder

Standard 2

Demonstrate understanding of basic camera operations, including:

- Focus
- White balance, both indoors and outdoors
- Basic exposure involving the iris/aperture and shutter speed
- Recording settings
 - Format
 - Current camera resolutions (720, 1080, 4K, etc.)
 - Appropriate frame rates and their uses

Standard 3

Demonstrate proper use of camera supports, including:

- Tripod
- Monopod
- Reducing camera shake when handheld

Standard 4

Identify and demonstrate effective shot composition (Framing), including:

- Rule of thirds
- The difference between nose room and lead room
- Head room
- Two shot

Standard 5

Identify and demonstrate effective use of various shot types, including:

- Wide or long (LS)
- Medium (MS)
- Close up (CU)

Standard 6

Identify and demonstrate effective use of various camera angles, including:

- High angle
- Eye level
- Low angle

Standard 7

Identify and demonstrate effective use of various camera movements, including:

- Pan
- Truck
- Tilt
- Pedestal
- Zoom
- Dolly
- Arc

Performance Skill

Understand and demonstrate knowledge of the correct operation of the camera.

- Identify the basic functions of the main parts of a camera.
- Demonstrate understanding of basic camera operations.
- Demonstrate proper use of camera supports.
- Identify and demonstrate effective shot composition (Framing).
- Identify and demonstrate effective use of various shot types.
- Identify and demonstrate effective use of various camera angles.
- Identify and demonstrate effective use of various camera movements.

STRAND 2

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

Standard 1

Identify various types of microphones and filters and demonstrate appropriate use of each:

- Microphone types
 - Lavalier
 - Handheld
 - Shotgun/boom
- Filters
 - Pop
 - Wind screen

Standard 2

Demonstrate effective editing of audio recordings.

- Identify and set appropriate audio levels for different audio types.
 - Dialogue
 - Sound effects
 - Music
 - Clipping
- Understand and demonstrate effective use of voice overs and narration.
- Understand and demonstrate effective use of ambient sound.

Performance Skill

Understand and demonstrate knowledge of audio systems and how they are used.

- Identify various types of microphones and filters and demonstrate appropriate use of each.
- Demonstrate effective editing of audio recordings.

STRAND 3

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

Standard 1

Demonstrate understanding of a three-point lighting system and its components.

- Key (spot)
- Back or Halo (spot)
- Fill (flood)

Standard 2

Identify and demonstrate effective use of lighting instruments and accessories, including:

- Direct light
- Diffused light
- Barn doors
- Reflectors
- Diffusers (softbox, umbrella, etc.)
- Gels

Standard 3

Setup and use lighting appropriately for various situations, including:

- Chroma key
- Background

Performance Skill

Understand and demonstrate knowledge of lighting systems and how they are used.

- Demonstrate understanding of a three-point lighting system and its components.
- Identify and demonstrate effective use of lighting instruments and accessories.
- Setup and use lighting appropriately for various situations.

STRAND 4

Students will be able to understand and demonstrate knowledge of broadcast production equipment and components.

Standard 1

Demonstrate basic use of a live production switcher and identify its components.

- Preview Row (Bus)
- Program Row (Bus)
- Key Row (Bus)
- Mix/Effects (M/E)
- Fader Bar

Standard 2

Demonstrate basic use of an audio mixer (soundboard).

- Mic/line inputs
- Mic/line faders
- Pan
- Master fader
- VU meter

Standard 3

Demonstrate proper use of a teleprompter.

Standard 4

Identify various cord/cable connectors.

- BNC
- HDMI
- Mini (1/8") jack
 - Stereo/Mono
- 1/4" jack
 - Stereo/Mono
- RCA
- USB
- XLR

Performance Skill

Understand and demonstrate knowledge of broadcast production equipment and components.

- Demonstrate basic use of a live production switcher and identify its components.
- Demonstrate basic use of an audio mixer (soundboard).
- Demonstrate proper use of a teleprompter.
- Identify various cord/cable connectors.

STRAND 5

Students will be able to understand and demonstrate knowledge of control room and studio personnel.

Standard 1

Understand various *control room* crew responsibilities.

- Producer
- Director
- Technical director
- Audio engineer
- Video playback
- Graphics
- Teleprompter

Standard 2

Understand various *studio* crew responsibilities.

- Floor director
- Camera operator
- Talent

STRAND 6

Students will be able to understand and demonstrate knowledge of pre-production.

Standard 1

Understand the purpose of and participate in pre-production meetings.

Standard 2

Use effective communication skills when planning a production, including:

- Purpose
- Audience

Standard 3

Understand and demonstrate principles of effective storyboarding.

Standard 4

Understand and demonstrate principles of effective script writing.

Standard 5

Understand and use a rundown for broadcast productions.

- Blocks/timeline
- Shot list (camera number, position, shot type)
- Bumper and teasers

Standard 6

Understand studio preparation.

Performance Skill

Understand and demonstrate knowledge of pre-production. Insert performance objective text.

- Understand and demonstrate principles of effective storyboarding.
- Understand and demonstrate principles of effective script writing.
- Understand and use a rundown for broadcast productions.

STRAND 7

Students will be able to demonstrate knowledge of news gathering.

Standard 1

Understand the difference between hard and soft news.

Standard 2

Understand and demonstrate effective interview techniques, including:

- Street interview
- Sit-down interview

Standard 3

Develop effective new stories that include:

- Interviews
- Narration
- B-roll
- Lead-in/out

STRAND 8

Students will be able to understand and demonstrate knowledge of post-production.

Standard 1

Demonstrate appropriate file management and archiving processes.

- Transferring
- Organizing
- Naming

Standard 2

Demonstrate effective editing workflows.

- Preview media
 - Trim
- Rough cut
 - Cuts
 - Transitions
- Tighten sequence
- Filters/effects
 - Graphics
 - Keyframe animation
 - Export

Standard 3

Understand and demonstrate effective output of media.

- Understand and use appropriate settings for desired output (i.e., web, mobile, movie screen, TV, etc.)
 - Codecs (h.264, ProRes, XAVC, etc.)
 - Containers (.MP4, .MOV, etc.)
 - Resolutions (720, 1080, 4K, etc.)
 - Frame per second

Performance Skill

Understand and demonstrate knowledge of post-production.

- Demonstrate appropriate file management and archiving processes.
- Demonstrate effective editing workflows.
- Understand and demonstrate effective output of media.

STRAND 9

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

Standard 1

Understand and demonstrate effective use of various visual effects, including:

- Chroma key
- Over-the-shoulder box
- Virtual studio
- Transitions

Standard 2

Understand and demonstrate effective use of graphics, including:

- Lower thirds
- Text

- Font styles
- Colors
- Title safe area
- Computer-generated design
- Still images

Performance Skill

Understand and demonstrate knowledge of visual effects and graphics.

- Understand and demonstrate effective use of various visual effects.
- Understand and demonstrate effective use of graphics.

STRAND 10

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

Standard 1

Define copyright, public domain, fair use, creative commons, and ethics.

Standard 2

Practice ethics and rules governing photojournalism.

- Fair use
- Time limitations
- Copying and distribution limitations

STRAND 11

Students will be able to understand the history of television broadcasting.

Standard 1

Understand various principles concerning the progression of television broadcasting.

- NTSC vs ATSC
- Interlaced vs Progressive
- Aspect ratios (4:3 vs 16:9)
- Resolutions (Standard 480 vs HD 720 to 4K)
- Analog vs Digital

STRAND 12

Students will understand the importance of career readiness skills as it relates to the workplace and outlined in the SkillsUSA Framework – Level 1.

Standard 1

Understand and demonstrate the attitude of cooperation.

- Develop awareness of cultural diversity and equality issues.
- Demonstrate effective communication with others.

- Apply team skills to a group project.
- Identify and apply conflict resolution skills.

Standard 2

Understand and demonstrate the ability of being resourceful and innovative.

- Discover self-motivation techniques and establish short-term goals.
- Measure/modify short-term goals.
- Review a professional journal and develop a three- to five-minute presentation.

Standard 3

Plan for your future career.

- Complete a self-assessment and identify individual learning styles.
- Define future occupations.
- Identify the components of an employment portfolio.
- List proficiency in program competencies.
- Complete a survey for employment opportunities.
- Create a job application.
- Assemble your employment portfolio.
- Employability skills: evaluate program comprehension.

Standard 4

Understand and demonstrate the ability to manage a project.

- Apply team skills to a group project.
- Observe and critique a meeting.
- Demonstrate business meeting skills.
- Explore supervisory and management roles in an organization.
- Identify and apply conflict resolution skills.
- Demonstrate evaluation skills.
- Manage a project and evaluate others.

Skill Certificate Test Points by Strand

Test Name	Test #	Number of Test Points by Strand										Total Points	Total Questions
		1	2	3	4	5	6	7	8	9	10		
Television Broadcasting 1	590	12	6	7	8	6	2	4	6	3	2	56	45