

# 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. This course 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.

<b>Intended Grade Level</b>	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
<b>License Area of Concentration</b>	CTE and/or Secondary Education 6-12
<b>Required Endorsement(s)</b>	
Endorsement 1	Audio Video Production

## STRAND 1

**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
- B-roll
- Lead-in / out

## STRAND 2

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

### Standard 1

Use effective communication skills when planning a production, including:

- Purpose
- Audience

### Standard 2

Understand and demonstrate principles of effective storyboarding.

### Standard 3

Understand pre-production meetings.

### Standard 4

Understand and use a rundown for broadcast productions.

- Blocks / timeline
- Shot list (camera number, position, shot type)
- Script

### Standard 5

Understand studio preparation.

## STRAND 3

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

### Standard 1

Identify the basic function 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 (fps) and their uses (24, 30, 60, etc.)

### 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

### 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

## STRAND 4

**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 recording.

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

## STRAND 5

**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, including:

- Direct light
- Diffused light

## Standard 3

Setup and use lighting appropriately for various situations, including:

- Chroma key

## STRAND 6

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

### Standard 1

Demonstrate appropriate file management.

- Transferring
- Organizing
- Naming

### Standard 2

Demonstrate effective editing workflows.

- Preview media
  - Trim
- Rough cut
  - Cut
  - Transitions
- Tighten sequence
- Filters / Effects:
  - Graphics
  - Keyframe animation
- Export

### Standard 3

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

- Chroma key

### Standard 4

Understand and demonstrate effective use of graphics, including:

- Lower thirds
- Text and Font styles
- Colors
- Title safe area
- Computer-generate design
- Still images

## Standard 5

Understand and demonstrate effective output of media.

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

## STRAND 7

**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
- Program Row
- Key Row
- Mix / Effect (M/E)
- Fader Bar

### Standard 2

Demonstrate basic use of an audio mixer (soundboard).

- Mic / line inputs
- Mic / line faders
- Gain
- Pan
- Master fader
- VU Meter

### Standard 3

Demonstrate proper use of a teleprompter.

### Standard 4

Identify various cord / cable connectors

- SDI
- HDMI
- Mini (1/8") jack – Stereo / Mono
- 1/4" jack – Stereo / Mono
- USB
- XLR

## STRAND 8

**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 Technician
- Video playback / Graphics
- Teleprompter

### Standard 2

Understand various studio crew responsibilities.

- Floor director
- Camera operator
- Talent

## STRAND 9

**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 10

**Students will understand the importance of career readiness skills as it relates to the workplace and outlined in the SkillsUSA Framework – Level 1. Any other CTSO may also be used to fulfill this Strand.**

### 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 employee 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.

### Performance Skills

- Strand 2: Understand and demonstrate knowledge of pre-production.
- Strand 3: Understand and demonstrate knowledge of the correct operation of the camera.
- Strand 4: Understand and demonstrate knowledge of audio systems.
- Strand 5: Understand and demonstrate knowledge of lighting systems and how they are used.
- Strand 6: Understand and demonstrate knowledge of post-production, including graphics.
- Strand 7: Understand and demonstrate knowledge of broadcast production equipment and components.

### Workplace Skills

Workplace skills should be practiced and improved on daily in the classroom to help students become efficient and reliable employees.

- Communication
- Problem Solving
- Teamwork
- Critical Thinking
- Dependability
- Accountability
- Legal requirements / expectations

### 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	5	2	12	5	7	8	9	6	2	0	56	44