

Television Broadcasting 1

Exam Information	Description
Exam number 590 Items 36 National Career Cluster Arts, Entertainment, & Design Certification available Yes	The Television Broadcasting 1 industry certification exam is designed to provide candidates with the basic knowledge and skills related to the television broadcasting industry. This course includes instruction and hands-on assignments in the following areas: broadcast camera operation, audio, lighting, pre-production, broadcast studio and control room operation, visual effects, and graphics.

Exam Blueprint and Performance Skills

Standard	Percentage of exam score
1. News Gathering	12%
2. Pre-Production*	5%
3. Camera Operation*	16%
4. Audio Systems*	9%
5. Lighting Systems*	12%
6. Post-Production*	16%
7. Broadcast Production Equipment*	14%
8. Control Room and Studio Personnel	14%
9. Copyright Laws, Ethics, and Legal Issues	2%
10. Professional Skills for the Workplace (Optional)	0%

*Includes performance skill evaluation

Standard 1 - News Gathering (12% of exam score)

Candidates will be able to demonstrate the purpose of storytelling and news gathering.

Objective 1 When planning a broadcast, identify the following and how they affect the planning process:

1. Purpose
2. Audience

Objective 2 Explore Journalism ethics.

1. Free exchange of information
2. Responsibility for accuracy
3. Honest and fair
4. Serving the public
5. Accountable and transparent

Objective 3 Understand and demonstrate how to determine what is a newsworthy story:

1. Impact
2. Proximity
3. Timeliness
4. Prominence
5. Conflict

Objective 4 Understand how to tell a story using the following types of content:

1. On Air Anchors
2. Pre Recorded Segments
3. Live Interviews

Standard 2 - Pre-Production (5%)

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

Objective 1 Create and use a rundown to plan broadcasts.

1. Show Structure
2. Segments
3. Script

Optional: Standard performance evaluations on the final page of this document

Standard 3 - Camera Operation (16%)

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

Objective 1 Identify the basic functions of the main parts of a camera, including:

1. Sensors
2. Lens
3. Body
4. Electronic Viewfinder or LCD (Liquid Crystal Display) screen

Objective 2 Demonstrate understanding of basic camera operations, including:

1. Focus
2. White balance, both indoors and outdoors
3. Basic exposure involving the iris/aperture and shutter speed
4. Recording settings
 - a. Current camera resolutions (1080 HD, 4K, etc.)

Objective 3 Demonstrate proper use of camera supports, including:

1. Tripod
2. Monopod

Objective 4 Identify and demonstrate effective shot composition (Framing)

1. Rule of thirds

Objective 5 Identify and demonstrate effective use of various shot selections, including:

1. Wide (WS)
2. Medium (MS)
3. Close up (CU)
4. Extreme close up (ECU)

Objective 6 Identify and demonstrate effective use of various shot selections, including:

1. Pan/Tilt
2. Zoom

Objective 7 Identify and demonstrate effective use of various camera angles, including:

1. High Angle
2. Eye Angle
3. Low Angle

Performance Skills

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

2. Identify the basic functions of the main parts of a camera.
3. Demonstrate understanding of basic camera operations.
4. Demonstrate understanding of basic camera supports.
5. Identify and demonstrate effective shot composition (framing).
6. Identify and demonstrate effective use of various shot selections.
7. Identify and demonstrate effective use of various camera movements.
8. Identify and demonstrate effective use of various camera angles.

Optional: Standard performance evaluations on the final page of this document

Standard 4 - Audio Systems (9%)

Candidates will be able to understand and demonstrate procedures for recording and editing audio.

Objective 1 Identify various types of microphones and demonstrate appropriate use of each:

1. Microphone types
 - a. Lavalier
 - b. Handheld mic
 - c. Shotgun/Boom mic
2. Audio Connector
 - a. Stereo
 - b. Mono

Objective 2 Demonstrate effective audio recordings

1. Understand and demonstrate effective control of ambient sound.
2. Understand and demonstrate appropriate levels while recording.
3. Clipping

Objective 3 Demonstrate effective audio editing.

1. Identify and set appropriate audio levels for different audio types:
 - a. Dialogue
 - b. Sounds effects
 - c. Music

Performance Skill

1. Understand and demonstrate procedures for recording and editing audio.
2. Identify various types of microphones and demonstrate appropriate use of each.
3. Demonstrate effective recording of audio.
4. Demonstrate effective editing of audio recordings.

Optional: Standard performance evaluations on the final page of this document

Standard 5 - Lighting Systems (12%)

Candidates will be able to understand and demonstrate knowledge of basic lighting principles.

Objective 1 Demonstrate understanding of three-point lighting and its components:

1. Key Light
2. Fill Light
3. Back Light

Objective 2 Setup and use lighting appropriately for various situations, including:

1. Natural vs. Artificial Light

Performance Skill

1. Understand and demonstrate knowledge of basic lighting principles.
2. Demonstrate understanding of three-point lighting and its components.
3. Setup and use lighting appropriately for various situations.

Optional: Standard performance evaluations on the final page of this document

Standard 6 - Post-Production (16%)

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

Objective 1 Demonstrate appropriate file management.

1. Transferring
2. Organizing
3. Naming

Objective 2 Demonstrate effective editing workflows.

1. Preview media
2. Rough Edit
3. Final Cut
4. Export

Objective 3 Demonstrate the use of filters and effects.

1. Graphics/Titles
2. Keyframe animation
3. Chroma key
4. Lower thirds
5. Title safe area
6. Still images

Objective 4 Understand and demonstrate effective output of the media.

1. Understand and use appropriate settings for desired output:
 - a. File Name & Location
 - b. Aspect Ratio (Horizontal or Vertical)
 - c. Resolutions (1080, 4K, etc.)
 - d. File Type (MP4, MOV, etc.)
 - e. File Size (H.264, ProRes, etc.)

Performance Skill

1. Understand and demonstrate knowledge of post-production.
2. Demonstrate appropriate file management
3. Demonstrate effective editing workflows.
4. Demonstrate use of graphics.
5. Understand and demonstrate effective output of the media.

Optional: Standard performance evaluations on the final page of this document

Standard 7 - Broadcast Production Equipment (14%)

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

Objective 1 Demonstrate basic use of a live production switcher and identify its components.

1. Preview Row
2. Program Row

Objective 2 Demonstrate basic use of an audio mixer (soundboard).

1. Inputs/Outputs
2. Faders
3. Master Fader

Objective 3 Demonstrate proper use of a teleprompter.

Objective 4 Identify various cord/cable connectors.

1. SDI (Serial Digital Interface)
2. HDMI (High-Definition Multimedia Interface)
3. 1/8" jack – Stereo / Mono

4. XLR (External Line Return)

Optional: Standard performance evaluations on the final page of this document

Standard 8 - Control Room and Studio Personnel (14%)

Candidates will be able to understand and demonstrate knowledge of the control room and studio crew.

Objective 1 Understand various control room crew responsibilities.

1. Producer
2. Director
3. Technical director
4. Audio Technician
5. Video playback / Graphics
6. Teleprompter Operator

Objective 2 Understand various studio crew responsibilities.

1. Floor director
2. Camera operator
3. Talent

Standard 9 - Copyright Laws, Ethics, and Legal Issues (3%)

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

Objective 1 Define and demonstrate copyright, licensing, and creative commons.

Standard 10 - Professional Skills for the Workplace (0%)

Candidates will learn how to cut advanced joinery and install hardware.

Objective 1 Explore career options related to course content.

Objective 2 Explore and participate in cocurricular activities related to course content.

1. Career Technical Student Organizations (CTSO's)
 - a. SkillsUSA
 - b. Technology Student Association
2. Other State and National Organizations

3. Related technical competitions

Workplace Skills

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

1. Communication
2. Problem Solving
3. Teamwork
4. Critical Thinking
5. Dependability
6. Accountability
7. Legal requirements/expectations

Performance Skills Evaluation

Exam name: Television Broadcasting 1

Candidate Name: _____

Performance assessments may be completed and evaluated any time before the certification is issued. The following performance skills can be used in connection with the associated standards and exam. The evaluator will function as the subject matter expert to determine if the candidate meets the skills requirements with a Yes/No for passing.

Standard 2 – Pre-production Understand and demonstrate knowledge of pre-production	Pass:
Standard 3 – Camera operation Understand and demonstrate knowledge of the correct operation of the camera.	Pass:
Standard 4 – Audio systems Understand and demonstrate knowledge of audio systems.	Pass:
Standard 5 – Lighting systems Understand and demonstrate knowledge of lighting systems and how they are used	Pass:
Standard 6 – Post-production - Understand and demonstrate knowledge of post-production, including graphics. - Understand and demonstrate knowledge of broadcast production equipment and components.	Pass:

Evaluator Name: _____

Date: _____