Television Broadcasting 1

Exam Information

Exam number
590

Items
36

Points
43

Prerequisites
None

Recommended course length
One semester

National Career Cluster
Arts, A/V Technology, & Communications
Science, Technology, Engineering, & Mathematics

Performance standards
Included (Optional)

Certificate available
Yes

Description

The Television Broadcasting 1 industry certification exam 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: broadcast camera operation, audio, lighting, pre-production, broadcast studio and control room operation, visual effects, and graphics.

Exam Blueprint

Standard	Percentage of exam
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	0%

Standard 1

Students 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

Students 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

Standard 3

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

Objective 1 Identify the basic function 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), including:

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 camera angles, including:

1. Pan/Tilt
2. Zoom

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

1. High angle
2. Eye level
3. Low angle

Standard 3 Performance Evaluation included below (Optional)

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.

Standard 4

Students 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. Lavaliere
    b. Handheld mic
    c. Shotgun/Boom mic
2. Audio Connector
    a. Stereo
    b. Mono

Objective 2 Demonstrate effective editing of audio recording.

1. Understand and demonstrate effective control of natural sound.
2. Understand and demonstrate appropriate levels while recording.
    a. Clipping

Objective 3 Demonstrate effective audio editing.

1. Identify and set appropriate audio levels for different audio types:
    a. Dialogue
    b. Sound Effect
    c. Music

Standard 4 Performance Evaluation included below (Optional)

Performance Skills

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.

Standard 5

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

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

1. Keylight
2. Fill light
3. Back light

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

1. Natural vs artificial lighting

Standard 5 Performance Evaluation included below (Optional)

Performance Skills

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

Standard 6

Students 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 cut
3. Final Cut
4. Export

Objective 3 Demonstrate the use of graphics and effects in a broadcast.

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

Objective 4 Understand and demonstrate effective output of 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.)

Standard 6 Performance Evaluation included below (Optional)

Performance Skills

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 media.

Standard 7

Students 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)

Standard 7 Performance Evaluation included below (Optional)

Standard 8

Students 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 8 Performance Evaluation included below (Optional)

Standard 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.

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

Standard 9 Performance Evaluation included below (Optional)

Standard 10

Students will understand and demonstrate the importance of career readiness and professionalism skills related to the workplace.

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

Workplace Skills

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

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

Standard 10 Performance Evaluation included below (Optional)

Television Broadcasting I

Performance assessments may be completed and evaluated at any time during the course. The following performance skills are to be used in connection with the associated standards and exam. To pass the performance standard the student must attain a performance standard average of 8 or higher on the rating scale. Students may be encouraged to repeat the objectives until they average 8 or higher.

Student's Name: _____

Class: _____

Performance standards rating scale

0	Limited skills	2	→	4	Moderate skills	6	→	8	High skills	10

Standard 2 – Pre-Production **Score:**

- Understand and demonstrate knowledge of pre-production.

Standard 3 – Camera Operation **Score:**

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

Standard 4 – Audio Systems **Score:**

- Understand and demonstrate knowledge of audio systems.

Standard 5 – Lighting Systems **Score:**

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

Standard 6 – Post-Production **Score:**

- Understand and demonstrate knowledge of post-production, including graphics.

Standard 7 – Post-production **Score:**

- Understand and demonstrate knowledge of broadcast production equipment and components.

Workplace Skills **Score:**

- 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

Performance standard average score:

Evaluator Name: _____

Evaluator Title: _____

Evaluator Signature: _____

Date: _____