

Television (Video) Production Blueprint

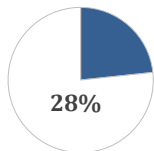
This Blueprint contains the subject matter content for the Career Essentials - Assessment.

Note: To fully prepare for the Television Production SkillsUSA Championships contest, refer to the current year's SkillsUSA Championships Technical Standard, now included with your SkillsUSA Professional Membership. If you need help in accessing this benefit, contact the SkillsUSA Customer Care Team at 844-875-4557 or customercare@skillsusa.org.

Standards and Competencies

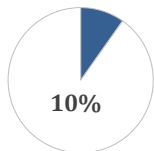
Competencies are weighted throughout the assessment. The percent shown is the weight of the competency. There are 50 questions per assessment.

Apply general video production knowledge



- Define HD standards
- Describe fields and frames
- Define interlaced and progressive scanning
- Describe digital signals
- Describe component and composite video signals
- Describe principles of color
- Define video resolution
- Describe safe area
- Describe aspect ratio
- Describe artifacts as applies to digital video
- Describe media acquisition
- Describe disk-based camcorders
- Define solid state memory storage
- Describe video servers
- Describe professional tape formats
- Define digital compression
- Calculate on-location power needs - voltage and wattage
- Define contrast ratio
- Identify audio connectors
- Identify video connectors
- Define a waveform monitor
- Demonstrate knowledge of copyright and licensing issues

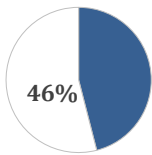
Implement the knowledge needed to describe Pre-Production



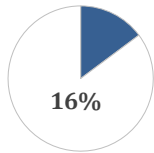
- Complete program proposal and treatment for a production
- Complete storyboards for a production
- Define scriptwriting guidelines
- Explain costing out a production
- Define crew positions
- Complete a location survey
- Define single-camera production
- Define production methods
- Illustrate microphone placement for on-location audio
- Demonstrate on-location lighting techniques
- Demonstrate drawing of a light plot

Apply the knowledge needed to describe and demonstrate production skills

- Apply the knowledge needed to describe and demonstrate lens operation and control
 - Describe the type of lenses
 - Define angle of view
 - Describe zoom ratio
 - Demonstrate f-Stops iris
 - Demonstrate control of depth of field
 - Illustrate focusing/follow focus/rack focus/macro focus
 - Explain the application of filters
 - Explain image stabilization
 - Demonstrate control of exposure through the use of f-Stops
- Apply the knowledge and skills necessary to describe and demonstrate camera operation and control
 - Describe and demonstrate camera mounts and tripod use
 - Operate camera pan heads
 - Demonstrate basic camera moves (i.e. pan/tilt/dolly/truck/pedestal)
 - Illustrate black balancing and white balancing
 - Describe shutter speed
 - Explain frame rate
- Implement the skills and knowledge needed for describing and demonstrating composition
 - Describe static composition
 - Describe dynamic composition
 - Define single center of interest
 - Describe shifting the center of interest
 - Describe basic camera shots i.e. long shot, medium shot, close-up shot, extreme close-up shot, two shot
 - Demonstrate leading the subject, head room
 - Describe the Rule of Thirds
 - Define crossing the line
- Apply the knowledge and skills needed to describe and demonstrate video lighting
 - Describe hard and soft lighting
 - Define color temperature of light sources
 - Demonstrate intensity control through varying distance
 - Identify lighting instruments
 - Demonstrate three point lighting (i.e., key/ fill/ back light)
 - Describe lighting ratios
 - Describe subject-to-background distance
 - Describe area lighting
 - Apply the uses of existing (natural) light
 - Apply control of existing (natural) light i.e. reflectors, diffusion screens
- Implement the skills and knowledge needed to describe and demonstrate audio
 - Position microphones
 - Demonstrate positioning of microphones cables
 - Describe types and uses of microphones
 - Describe the use microphone support and shields systems i.e. mic stands, booms, shock mounts, wind socks, windscreens
 - Demonstrate operation of audio mixer controls
 - Describe issues of interfacing with audio from a PA system
 - Describe production communication systems



Apply the knowledge and skills necessary to describe and demonstrate post-production skills



- Apply the knowledge and skills needed to describe and demonstrate video editing
 - Demonstrate continuity editing techniques
 - Demonstrate cutaways
 - Define relational and thematic editing
 - Demonstrate bridging jumps in action
 - Demonstrate bridging interview edits
 - Demonstrate use of background music and sound effects
 - Demonstrate maintaining consistency in action and detail
 - Demonstrate operation of software-based editors
 - Explain time-code
 - Define on-line and off-line editing
- Apply the knowledge and skills needed to describe and demonstrate graphics, transitions, and effects
 - Describe titling
 - Describe character generator
 - Describe motion graphics
 - Describe sports graphics
 - Describe placement of graphics
 - Describe types and use of transitions
 - Describe downstream and upstream keying

Committee Identified Academic Skills

The SkillsUSA national technical committee has identified that the following academic skills are embedded in the television (video) production training program and assessment:

Math Skills

- Measure angles
- Apply transformations (rotate or turn, reflect or flip, translate or slide, and dilate or scale) to geometric figures
- Find slope of a line

Science Skills

- Use knowledge of mechanical, chemical and electrical energy
- Use knowledge of heat, light and sound energy
- Use knowledge of temperature scales, heat and heat transfer
- Use knowledge of sound and technological applications of sound waves
- Use knowledge of the nature and technological applications of light
- Use knowledge of static electricity, current electricity and circuits

Language Arts Skills

- Demonstrate use of verbal communication skills, such as word choice, pitch, feeling, tone and voice
- Analyze mass media messages

Connections to National Standards

State-level academic curriculum specialists identified the following connections to national academic standards.



Math Standards

- Numbers and operations
- Geometry
- Measurement
- Data analysis and probability
- Problem solving
- Communication
- Connections
- Representation

Source: NCTM Principles and Standards for School Mathematics. To view high school standards, visit: <http://www.nctm.org/standards/content.aspx?id=16909>.

Science Standards

- Understands the structure and properties of matter
- Understands the sources and properties of energy
- Understands forces and motion
- Understands the nature of scientific inquiry
- Understands the scientific enterprise

Source: McREL compendium of national science standards. To view and search the compendium, visit: www.mcrel.org/standards-benchmarks/.

Language Arts Standards

- Students adjust their use of spoken, written and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes
- Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes
- Students conduct research on issues and interests by generating ideas and questions and by posing problems. They gather, evaluate and synthesize data from a variety of sources (e.g., print and nonprint texts, artifacts, people) to communicate their discoveries in ways that suit their purpose and audience
- Students use spoken, written and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion and the exchange of information)

Source: IRA/NCTE Standards for the English Language Arts.