

Instructional Framework

Stagecraft

50.0599.00



This Instructional Framework identifies, explains, and expands the content of the standards/measurement criteria, and, as well, guides the development of multiple-choice items for the Technical Skills Assessment. This document corresponds with the Technical Standards endorsed on January 25, 2018.

Domain 1: Production Staging	
Instructional Time: 25-35%	
STANDARD 2.0 APPLY ESSENTIAL PRODUCTION AND CONSTRUCTION TECHNIQUES RELATIVE TO SCENERY	
2.1 Practice shop and safety procedures (i.e., cleaning, maintaining equipment, storage of materials, etc.)	<ul style="list-style-type: none">• Define personal protection equipment (PPE)<ul style="list-style-type: none">○ Eye protection○ Ear protection• Correct hazardous material storage and disposal• Define Safety Data Sheets (SDS)• First aid• Visual safety inspection (i.e., clear workspace, guards, tables, fences, mounting/locks, cables and blades in good repair, etc.)
2.2 Explain production design documentation as it applies to scenery	<ul style="list-style-type: none">• Floorplan/ground plan• Front elevation• Rear elevation• Paint elevation• Reading a ruler and a scale ruler
2.3 Select specific construction materials, techniques, tools, and hardware as necessary for the task	<ul style="list-style-type: none">• Types of lumber<ul style="list-style-type: none">○ Dimensional lumber○ Sheet lumber• Types of hardware<ul style="list-style-type: none">○ Drywall screws○ Box nails○ Bolts, nuts, and washers• Types of tools<ul style="list-style-type: none">○ Hand tools○ Power tool○ Pneumatic tools

2.4 Select appropriate scenic painting techniques and supplies	<ul style="list-style-type: none"> • Types of paint tools • Types of paints <ul style="list-style-type: none"> ○ Latex ○ Acrylic ○ Oil-based
2.5 Apply fundamental scenic painting techniques (i.e., thinning paint, scumbling, spattering, etc.)	<ul style="list-style-type: none"> • Sponging, dry brush, scumbling, spattering, etc. • Color mixing
2.6 Maintain proper care of tools and supplies	<ul style="list-style-type: none"> • Care of paint tools • Proper storage of paint • Care and storage of tools and shop materials
STANDARD 10.0 PERFORM TASKS NECESSARY TO SUPPORT THE PRODUCTION	
10.1 Demonstrate stage safety protocols	<ul style="list-style-type: none"> • Stage safety <ul style="list-style-type: none"> ○ Pre- and post-production ○ In production • Proper lifting techniques
10.2 Operate various stage mechanics (i.e., rigging, turntables, hydraulics, etc.)	<ul style="list-style-type: none"> • Rigging • Turntables • Hydraulics
10.3 Load-in and strike production elements on stage	<ul style="list-style-type: none"> • Situational awareness • PPE (workwear including lace-up closed toe shoes, eyes, ears, respiration, hard hats, gloves, etc.) • Proper lifting and carrying techniques
10.4 Establish and use proper backstage decorum	<ul style="list-style-type: none"> • Appropriate clothing • Being engaged in the production and process <ul style="list-style-type: none"> ○ No phones backstage ○ Limited talking ○ Maintain clean and safe stage and wings
10.5 Implement the care and upkeep of the performance space and work areas	<ul style="list-style-type: none"> • Maintain clean and safe <ul style="list-style-type: none"> ○ Shop ○ Stage and wings ○ Costume room and sewing lab ○ Makeup room

- Green room
- House/Lobby

Domain 2: Production Control and Operations

Instructional Time: 20-30%

STANDARD 6.0 DEMONSTRATE SAFE RIGGING PRACTICES

6.1 Practice all rigging and safety protocols (i.e., restricted access, signage proper training, etc.)

- Visual inspection of line set
- Call out, fly in, and fly out with response
- Load/Weight verification
- Listen for issues when running a line
- Stop if there are any issues
- Only trained personnel can operate counterweight system
- Trained personnel only signage

6.2 Demonstrate proficiency in clove-hitch, bowline, half-hitch, and snub knots

- Proficiency
 - Clove-hitch
 - Bowline
 - Half-hitch
 - Snub knots

6.3 Identify all types of counterweight systems (i.e., single and double purchase theatrical rigging systems)

- Parts and components of a counterweight system
- Counterweight systems
 - Single purchase systems
 - Double purchase systems

6.4 Distinguish between motorized rigging systems (e.g., packaged hoists, line shafts, and chain motors)

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6.5 Identify appropriate rigging hardware

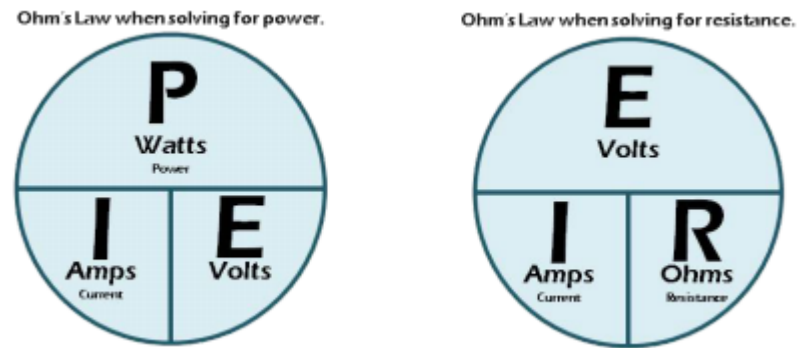
- Wire rope
- Wire rope clamps
- Shackles
- Carabiners
- Wire rope sleeves
- Thimbles
- Slings
- Turnbuckles
- Cheese boroughs

STANDARD 8.0 DEMONSTRATE PRODUCTION LIGHTING TECHNIQUES

8.1 Practice appropriate safety lighting protocols, including electrical, rigging, etc.

- PPE (workwear including lace up closed toe shoes, gloves, etc.)
- Safe working height and tool safety at heights
- Electrical safety
 - Conductors vs. insulators
 - Disconnect and lockout/tagout
 - Test (multimeter) continuity and circuit
 - Known maximum loads (such as lighting fixtures per circuit)

8.2 Apply Ohm's law



This is commonly known as the PIE or it's not a pie! formula.

PIE - $P=I \cdot E$ $W=V \cdot A$

8.3 Identify lighting instruments and their uses (i.e., PAR, Strip, Scoop, House lights, Work lights, etc.)

- Identify instruments by use - conventional vs. LED formats
- Ellipsoidal
- Fresnel
- PAR/Multi-PAR
- Far Cyc
- Automated lights/other devices

8.4 Recognize major lighting protocols (i.e., DMX512, sACN, Art-Net, etc.)

- Major lighting protocols (i.e., DMX512, sACN, Art-Net, etc.)

8.5 Maintain conventional lighting equipment (i.e., Fresnel, Ellipsoidal, PAR, etc.)

- Cleaning lenses
- Inspecting and repairing electrical cords
- Inspect ceramic base/terminal blocks inside fixtures
- Inspecting and repairing strain reliefs

8.6 Apply the fundamentals of lighting board operation and addressing	<ul style="list-style-type: none"> • Patch <ul style="list-style-type: none"> ○ Conventional instruments ○ Multi address/attribute instruments • Recording and editing cues (cue mode and tracking mode) • Park • Control protocols (LTP/HTP)
8.7 Explain lighting plot design documentation as it applies to lighting	<ul style="list-style-type: none"> • Light plot <ul style="list-style-type: none"> ○ Key ○ Industry standard symbols • Magic sheet • Cue sheets • Schedules <ul style="list-style-type: none"> ○ Dimmer ○ Channel ○ Color ○ Instrument
8.8 Hang and focus lighting instruments, including cabling	<ul style="list-style-type: none"> • Hang and focus lighting instruments <ul style="list-style-type: none"> ○ Optimizing the field ○ Shutter and beam • Cable management • Safety cabling
8.9 Identify basic lighting accessories (i.e., barn doors, irises, top hats, gel frames, gobo, etc.)	<ul style="list-style-type: none"> • Barn doors • Irises • Top hats • Gel frames • Gobo • Safety cables
STANDARD 9.0 DEMONSTRATE BASIC PRODUCTION AUDIO TECHNIQUES	
9.1 Employ safety protocols, including electrical, rigging, etc.	<ul style="list-style-type: none"> • Ohm's Law • Safe decibel levels • Rigging practices including appropriate hardware
9.2 Distinguish among microphones, speakers, amplifiers, and peripherals	<ul style="list-style-type: none"> • Microphones <ul style="list-style-type: none"> ○ Dynamic ○ Condenser

	<ul style="list-style-type: none"> ○ Pickup patterns ○ Common types including lavalier, boundary, hanging, held ● Speakers <ul style="list-style-type: none"> ○ Active, passive, monitor, main, full range, subwoofer ● Peripherals ● Effects, recording, communication, hearing assist
9.3 Operate an audio system (i.e., console, cabling connection, and signal flow)	<ul style="list-style-type: none"> ● Signal path - input, processing, amplification, output ● Console <ul style="list-style-type: none"> ○ Channel control ○ Output control <ul style="list-style-type: none"> ▪ Main ▪ Aux ● Phantom power ● Types of cables and uses ● Types of connectors and uses
9.4 Interpret production documentation as it applies to audio	<ul style="list-style-type: none"> ● Sound plot ● Block diagram <ul style="list-style-type: none"> ○ Understand basic universal electrical symbols <ul style="list-style-type: none"> ▪ Title block ▪ Amplifier ▪ Speaker ● Cue sheets
9.5 Utilize playback software	<ul style="list-style-type: none"> ● Define production playback software and capability

Domain 3: Theatrical Production Techniques Instructional Time: 15-25%	
STANDARD 3.0 DEMONSTRATE BASIC PRODUCTION TECHNIQUES RELATIVE TO COSTUMES	
3.1 Practice shop and safety protocols as they apply to fitting and adjusting costumes (i.e., sewing, ironing, etc.)	<ul style="list-style-type: none"> ● First aid ● Hygienic maintenance ● Clean and orderly work area ● Chemical handling and storage ● Hot plate/iron and steamer safety
3.2 Explain production design documentation as it applies to costumes	<ul style="list-style-type: none"> ● Costume plot ● Renderings/Sketches

	<ul style="list-style-type: none"> • Swatches • Measurement sheets
<p>3.3 Interpret a pre-made pattern to construct a costume</p>	<ul style="list-style-type: none"> • Pattern symbols <ul style="list-style-type: none"> ○ Grain line ○ Fold line ○ Centre front or back ○ Seam allowance ○ Stitching line ○ Darts ○ Buttons and buttonhole ○ Dots ○ Notches • Fittings
<p>3.4 Identify costume construction materials, tools, and hardware</p>	<ul style="list-style-type: none"> • Needles • Thread • Measuring tools <ul style="list-style-type: none"> ○ Seam gauge ○ Flexible measuring tape ○ Seam ripper • Fabric Marking <ul style="list-style-type: none"> ○ Chalk ○ Fabric markers ○ Fabric pencils • Pins • Thimble • Buttons • Iron • Ironing board • Steamers • Scissors (fabric) • Sewing machine <ul style="list-style-type: none"> ○ Bobbin ○ Hand wheel ○ Presser foot ○ Take-up lever ○ Foot pedal ○ Reverse stitch

3.5 Apply appropriate construction techniques based on the type of fabric	<ul style="list-style-type: none"> • Basic hand stitches <ul style="list-style-type: none"> ◦ Running stitch ◦ Back stitch ◦ Whip stitch
3.6 Organize quick changes, costume repairs, and general maintenance through the run of a show	<ul style="list-style-type: none"> • Costume plot • Emergency sewing kit backstage • Sort/Organize costumes • Daily hygienic maintenance
STANDARD 4.0 DEMONSTRATE BASIC PRODUCTION TECHNIQUES RELATIVE TO MAKEUP	
4.1 Practice shop safety and health protocols as they apply to the application and removal of makeup (i.e., hygiene for hands and makeup supplies, personal makeup, care of makeup, etc.)	<ul style="list-style-type: none"> • Cross contamination prevention <ul style="list-style-type: none"> ◦ No sharing tools ◦ No sharing makeup ◦ Asking about or checking for allergies to materials
4.2 Explain production design documentation as it applies to makeup	<ul style="list-style-type: none"> • Renderings • Makeup plot
4.3 Select appropriate makeup materials, tools, and equipment	<ul style="list-style-type: none"> • Brushes • Sponges • Crepe hair • Latex • Spirit gum/Spirit gum remover • Prosthetic adhesive • Putty (derma wax)
4.4 Select makeup choices appropriate to the character(s) in the production (i.e., foundation, lipstick, blush, eyeshadow, etc.)	<ul style="list-style-type: none"> • Creme based, pancake, greasepaint • Highlights • Shadows/Lowlight • Stippling • Prosthetics
STANDARD 5.0 DEMONSTRATE BASIC PRODUCTION, CONSTRUCTION, AND ACQUISITION RELATIVE TO PROPERTIES	
5.1 Practice shop safety and personal protocols as they apply to production construction and acquisition	<ul style="list-style-type: none"> • PPE (i.e., workwear including lace up closed toe shoes, eyes, ears, lungs, gloves, etc.) • Correct hazardous material storage and disposal • Safety Data Sheets (SDS) • First aid

	<ul style="list-style-type: none"> • Visual safety inspection (i.e., clear workspace, guards, tables, fences, mounting/locks, cables and blades in good repair, etc.)
5.2 Explain production design documentation as it applies to properties	<ul style="list-style-type: none"> • Prop list (pull, build, borrow, buy, or rent) • Prop plot (shift or tracking)
5.3 Select construction materials, techniques, tools, and hardware as needed	<ul style="list-style-type: none"> • Materials including but not limited to <ul style="list-style-type: none"> ◦ Food ◦ Wood ◦ Fabric ◦ Foam ◦ Plastic • Tools including but not limited to <ul style="list-style-type: none"> ◦ Glue gun ◦ Heat gun ◦ Hot wire foam cutter ◦ Paint tools ◦ Rotary tool
5.4 Organize and maintain properties table for the run of a show	<ul style="list-style-type: none"> • Putting props where they are needed based on production needs • Proper marking of a prop table/cabinet • Inventory/Securing valuable props

Domain 4: Production Foundations

Instructional Time: 10-15%

STANDARD 1.0 RECOGNIZE STAGECRAFT FUNDAMENTALS THAT MAKE A PRODUCTION SUCCESSFUL

1.1 Identify the technical aspects of theatrical production (e.g., constructing and rigging scenery; hanging and focusing of lighting; design and procurement of costumes; make-up; stage management; audio engineering; and procurement of props)	<ul style="list-style-type: none"> • Constructing and rigging scenery • Hanging and focusing of lighting • Design and procurement of costumes • Makeup • Stage management • Audio engineering • Procurement of props
1.2 Describe the production process in terms of strategies, implementation, and execution	<ul style="list-style-type: none"> • Pre-production <ul style="list-style-type: none"> ◦ Artistic/Director concept

	<ul style="list-style-type: none"> ○ Actively building the show ○ Rehearsal procedures ● Production run <ul style="list-style-type: none"> ○ Running crew responsibilities ● Post-production <ul style="list-style-type: none"> ○ Strike
1.3 Identify the technical roles and their responsibilities to the production process	<ul style="list-style-type: none"> ● Theatre hierarchy
1.4 Explain the relationship between a design and planning and executing a production to its fruition	<ul style="list-style-type: none"> ● Relationship between a design and planning and executing a production to its fruition
1.5 Communicate using technical production terminology	<ul style="list-style-type: none"> ● Communicate using technical production terminology
STANDARD 7.0 CHARACTERIZE TYPES OF SOFT GOODS EMPLOYED BY THEATERS	
7.1 Practice safety and personal protocols as they apply to soft goods	<ul style="list-style-type: none"> ● Flame retardancy/prooing ● Proper hanging of soft goods ● Rehearsal and performance trim height
7.2 Appraise fundamental types of soft goods (e.g., legs, borders, scrims, drops, cyclorama, and traveler)	<ul style="list-style-type: none"> ● Legs ● Borders ● Scrims ● Drops ● Cyclorama ● Traveler
7.3 Apply appropriate handling, hanging, and folding techniques for drapes	<ul style="list-style-type: none"> ● Drapes appropriate <ul style="list-style-type: none"> ○ Handling ○ Hanging ○ Folding techniques
STANDARD 12.0 EMPLOY SAFE PRACTICES AND PERSONAL PROTECTION	
12.1 Use personal protective equipment (PPE) for the task	<ul style="list-style-type: none"> ● Eye and face ● Respiratory protection ● Head protection ● Foot and leg protection ● Hand and arm protection ● Body protection ● Hearing protection

12.2 Inspect ladders at frequent intervals for safety	<ul style="list-style-type: none"> • Proper footing • Use of correct ladder height for task • Duty rating (weight and classification)
12.3 Follow safe practice codes of fall protection for heights above 7.5 feet	<ul style="list-style-type: none"> • For use with scaffolding and/or lifts, use proper harnessing based on task
12.4 Identify key components within the SDS	<ul style="list-style-type: none"> • Identification • Hazards identification • Composition/Information on ingredients • First-aid measures • Firefighting measures • Accidental release measures • Handling and storage • Exposure controls/Personal protection • Physical and chemical properties • Stability and reactivity • Toxicological information
12.5 Recognize risk associated with production (i.e., set construction, special effects, electrics, etc.)	<ul style="list-style-type: none"> • Proper bracing • Recognizing spike marks • Securing loose cables • Fire safety • Chemical safety • Material cleanup • Darkness
12.6 Demonstrate safe handling and storage of materials	<ul style="list-style-type: none"> • Identification • Hazards identification • Physical and chemical properties • Stability and reactivity

Domain 5: Professionalism

Instructional Time: 5-10%

STANDARD 11.0 PRACTICE MARKETABLE PROFESSIONAL SKILLS

11.1 Exhibit computer literacy as related to technical production reports	<ul style="list-style-type: none"> • Spreadsheets • Word processing
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	<ul style="list-style-type: none"> • Document sharing • Email
11.2 Develop a technical production portfolio and résumé	<ul style="list-style-type: none"> • Portfolio specific to area
11.3 Assemble a toolkit with essential hardware (i.e., crescent wrench, box cutter, meters, screwdrivers, pliers, etc.)	<ul style="list-style-type: none"> • Assemble a toolkit with essential hardware relative to specific area
11.4 Identify social networks to appropriately further your career	<ul style="list-style-type: none"> • Social networks to appropriately further your career • Appropriate postings and profile
11.5 Characterize the role of unions and professional affiliations as they relate to theater and related industries	<ul style="list-style-type: none"> • Role of unions and professional affiliations as they relate to theater and related industries
11.6 Research job, internship, and higher/continuing education opportunities, including scholarships in technical production	<ul style="list-style-type: none"> • Research job, internship, and higher/continuing education opportunities, including scholarships in technical production

