

RAT-1600: CONCERT TECHNICAL PRODUCTION

Cuyahoga Community College

Viewing: RAT-1600 : Concert Technical Production

Board of Trustees:

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Academic Term:

Fall 2021

Subject Code

RAT - Recording Arts & Technology

Course Number:

1600

Title:

Concert Technical Production

Catalog Description:

Concert Technical Production is a comprehensive applied study of all aspects of venue and show production. Topics include production, lighting, sound, staging, personnel, stage management, stagehand training, touring road crew protocol, venue load in/load out procedures and musical instrument technical support at live music events. Students will apply above principles in weekly labs at live music concerts.

Credit Hour(s):

3

Lecture Hour(s):

1

Lab Hour(s):

4

Requisites

Prerequisite and Corequisite

None.

Outcomes

Course Outcome(s):

Demonstrate show/performance load-in/out procedure.

Essential Learning Outcome Mapping:

Not Applicable: No Essential Learning Outcomes mapped. This course does not require application-level assignments that demonstrate mastery in any of the Essential Learning Outcomes.

Objective(s):

1. Demonstrate safe procedure while unloading equipment from vehicle / trailer / van / bus and roll cases up ramps and onto the stage.
2. Identify needs of touring stage crew and assist when necessary.
3. Assist with talent/performers load in, set up, line check, performance, tear down and load out.
4. Assist touring staff with post show protocols.
5. Locate "dead cases" and set them up for re-boxing of equipment.
6. Demonstrate the ability to properly repack equipment in the performer's vehicle.

Course Outcome(s):

Demonstrate equipment setup/teardown for a national touring act.

Essential Learning Outcome Mapping:

Not Applicable: No Essential Learning Outcomes mapped. This course does not require application-level assignments that demonstrate mastery in any of the Essential Learning Outcomes.

Objective(s):

1. Locate and distribute A/C power boxes as needed to all the electric amplifiers, pedal boards, and appliances.
2. Plug in A/C power of the amplifiers and effects pedal boards in accordance with stage crew guidance and technical show riders.
3. Dispose of "dead" or empty cases into designated storage areas.
4. Complete the clearing of the stage which includes fold backs / monitors, drum riser and microphone stands.
5. Demonstrate appropriate stage cleaning techniques using OSHA and venue safety protocols.
6. Determine safe placement load-in ramps and place accordingly (downstage center and/or over venue stairs).
7. Assist touring staff with equipment breakdown and disassembly of show's equipment (instrument recasing, cable wrapping, lights and special effects recasing).
8. Locate and replace downstage and stairwells loading ramps to start load out.
9. Finalize load out by assisting in-house production staff with post show equipment storage (monitor replacing, drum riser disassembly, cable wrapping and storage, stage clean up, drink disposal, vacuuming and next show prep).

Course Outcome(s):

Demonstrate show / performance microphone wiring using proper stage-plot, sub-snake and XLR cabling as provided by the technical show rider.

Essential Learning Outcome Mapping:

Not Applicable: No Essential Learning Outcomes mapped. This course does not require application-level assignments that demonstrate mastery in any of the Essential Learning Outcomes.

Objective(s):

1. Replace drum riser and stage monitors.
2. Determine which microphones will be used for specific instruments (vocals, direct box usage etc.) using both the provided microphones from touring crew and the venue's on-hand microphone inventory.
3. Determine sub-snake patch and XLR cord layout.
4. Execute wiring of sub snake, XLR and microphones.
5. Assist with stage crew / performers equipment setup (following instructions and stage plot layout to provide in house support).
6. Demonstrate proper microphone stand placement.
7. Demonstrate the ability to replace microphones, mic stands and equipment back to original headliner stage plot protocols.

Course Outcome(s):

Understand pre, during and post show protocol and stage directions.

Essential Learning Outcome Mapping:

Not Applicable: No Essential Learning Outcomes mapped. This course does not require application-level assignments that demonstrate mastery in any of the Essential Learning Outcomes.

Objective(s):

1. Execute the instructions of in-house production and / or touring personnel when placing stage equipment.
2. Explain basic stagehand terminology and lingo.
3. Differentiate between common stage equipment and gear (mics, boom, risers, ramps etc.).
4. Differentiate between stage directions (upstage, downstage, stage right, stage left, etc.).

Course Outcome(s):

Understand the input/output signal flow of all equipment routed to the stage sub snake.

Essential Learning Outcome Mapping:

Not Applicable: No Essential Learning Outcomes mapped. This course does not require application-level assignments that demonstrate mastery in any of the Essential Learning Outcomes.

Objective(s):

1. Execute the connection of electric instruments to an effects pedalboard.
2. Execute the connection of electric instruments to instrument amplifiers.
3. Assign and plug in the proper microphone channels into the correct sub-snake channel number.
4. Identify the proper microphone channel input on the mixing console.
5. Assign and plug in the proper microphone channels into the mixing console from the sub-snake.
6. Assist with microphone / PA channels changeover via cross patching.

Course Outcome(s):

Demonstrate live sound mixing using a Front of House Console and outboard effects gear.

Essential Learning Outcome Mapping:

Not Applicable: No Essential Learning Outcomes mapped. This course does not require application-level assignments that demonstrate mastery in any of the Essential Learning Outcomes.

Objective(s):

1. Execute a line-check on individually assigned microphone channels on the mixing console per assigned instrument.
2. Demonstrate the ability to establish a proper line level mix of all the utilized channels into a solid rough sound check mix without feedback.
3. Execute a proper sound check with the band / performer.
4. Adjust balances between sound sources using faders, pans and frequency adjustments.
5. Operate outboard time based processors such as reverbs and delays as needed.

Course Outcome(s):

Understand basic lighting console techniques and power distribution.

Essential Learning Outcome Mapping:

Not Applicable: No Essential Learning Outcomes mapped. This course does not require application-level assignments that demonstrate mastery in any of the Essential Learning Outcomes.

Objective(s):

1. Identify lighting equipment required for the performance.
2. Recognize the differences of "In-house" production Vs "Tour Production" lighting requirements and equipment.
3. Assist touring production staff with implementation of their lighting and production requirements.
4. Execute the layout of cabling, A/C power, positioning of lighting equipment.
5. Understand power requirements for lighting equipment.
6. Understand OSHA safety protocols in regards to ladder usage, replacement of lighting gels and the moving of lighting fixtures.
7. Assist touring staff as they adjust stage lighting focus.
8. Identify individual lighting channels.
9. Demonstrate scene setting and changing.

Methods of Evaluation:

1. Worksheets
2. Written exams
3. Verbal Exam
4. Lab assignments
5. Evaluation of classroom participation

Course Content Outline:

1. Production Manager Functions
 - a. Pre and post pouring set-up, advancing and operations
 - b. Advancing for pre-tour rehearsals and venue site characteristics
 - c. Assembly of tour personnel
 - d. Accessing tour requirements

- e. Assembly of itinerary information
 - f. Assessing transportation requirements
 - g. Daily operations
 - h. End of show and tour duties
2. Technical Aspects of Production Management
- a. Work environment safety
 - b. Show setup and strike sequence
 - c. Stage monitor duties
 - d. Front of House sound duties
 - e. Lighting designer duties
 - f. Sound crew duties
 - g. Light crew duties
 - h. Scrim, banners, kabuki drops, video screens, video walls, pyrotechnic, barricade placement
 - i. Additional production jobs, band, dressing room, set up, support
 - j. Load in and load out procedures/packing and unloading of trucks
3. Stage Management Functions
- a. Management of touring crew
 - b. Management of local stagehands
 - c. Flow of gear for load in/ load out
 - d. Lights, set up, running of snakes, protocol
 - e. Sound, set up, running of snakes, protocol
 - f. Staging, ego ramps, props and drops
 - g. Musical equipment
4. Concert Sound and Lighting Equipment
- a. Monitor console operation
 - b. Front of House console operation
 - c. Lighting console operation
5. Local Production Staff
- a. Promoter
 - b. Venue manager and staff
 - c. Stagehands (union and non-union, Teamsters, forklift operator)
 - d. Security staff
 - e. Caterers
 - f. Runners
 - g. Fire Marshall
 - h. Other production jobs, band, dressing room, set up, support
6. Musical Performance Technicians
- a. Guitar technician job description and performance requirements
 - b. Bass technician job description and performance requirements
 - c. Drums and percussion technician job descriptions, requirements
 - d. Keyboard technician job description and requirements

Resources

Carter, Paul. *Backstage Handbook, An Illustrated Almanac of Technical Information*,. 3rd Ed. Louisville: Broadway Press, 1994.

Vasey, John. *Concert Tour Production Management*. 1st. Burlington: Focal Press, 1998.

Ray, Marky . *Rock and Roll Mercenary*. : Misteray Press (Self), 2009.

Robert Kronenburg. *This Must Be The Place: An Architectural History of Popular Music Performance Venues*. 1rst. New York: Bloomsbury Academic, 2019.

Nat Chiaffarano. *Progressive Marketing Plan for a Concert and Event Promoter: A Detailed Template with Innovative Growth Strategies*. 3rd. Pembroke Pines: Progressive Business Consulting, Inc, 2017.

Donald S. Passman. *All You Need to Know About the Music Business*. 10th. New York: Simon & Schuster, 2019.

"www.roadcrewtouring.com"

"www.prosoundnews.com"

"mixonline.com"

"www.roadie.net"

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