RAT-2550: ADVANCED LIVE SOUND REINFORCEMENT

Cuyahoga Community College

Viewing: RAT-2550 : Advanced Live Sound Reinforcement
Board of Trustees:
2008-05-22

Academic Term:
2008-08-23

Subject Code
RAT - Recording Arts & Technology

Course Number:
2550

Title:
Advanced Live Sound Reinforcement

Catalog Description:
This is a hands-on lab course. A small team of students under the direction of a faculty supervisor set up and operate sound systems at live music concerts. Topics include sound system components, assembly, operation, location recording, technical maintenance and performance. Students serve as crew for a minimum of twelve shows during the semester at local venues using small and medium size sound systems.

Credit Hour(s):
3

Lecture Hour(s):
0
Lab Hour(s):
6

Requisites

Prerequisite and Corequisite
RAT-1520 Audio Signal Processing, and RAT-2540 Live Sound Reinforcement

Outcomes
Course Outcome(s):
A. Set up, operate, maintain and troubleshoot sound systems at live music concerts

Objective(s):

1. 1. Set up a sound system.
2. 2. Operate a Front of House system.
3. 3. Operate a Monitor system.
4. 4. Perform a live to stereo concert recording.
5. 5. Perform sound system maintenance and troubleshooting.

Methods of Evaluation:

1. Examination of technical performance
2. Evaluation of daily lab journal
3. Written cognative evaluation

Course Content Outline:

1. Sound system components
    a. Microphones
    b. Mixing consoles

    c. Signal processing
    d. Amplifiers
    e. Speakers
    f. Cabling
2. Sound system assembly
    a. Speakers
    b. Mixing consoles
    c. Microphones
    d. Monitors
    e. Amplifiers and crossovers
    f. Signal processing
    g. Cabling
       i. A.C. power
      ii. Speaker
     iii. Microphone and snakes
     iv. System setup and teardown
3. Sound system operation
    a. Mixing consoles
    b. Speakers, amplifiers an crossovers
    c. Signal processing
    d. System tuning
       i. House
      ii. Monitor
     iii. Sound checks
     iv. Mixing theory
    e. Live documentation recording techniques
4. Technical
    a. Acoustics
    b. Component specifications
    c. A.C. power
    d. Grounding
    e. Troubleshooting
    f. System maintenance
5. Performance
    a. Preproduction
    b. On site talent management
    c. Crew interaction
    d. Facility interaction

Resources

Davis, Gary Jones, Ralph. *Sound Reinforcement Handbook.* 2nd. Milwaukee:Hal Leonard Publishing, 1990.

Stark, Scott Hunter. *Live Sound Reinforcement.* Milwaukee: Hall Leonard Publishing, 1996.

Resources Other
1. Website: Pro Sound Web. www.prosoundweb.com/index.php.srlive (http://www.prosoundweb.com/index.php.srlive/)
2. Professional Journal/Website: www.prosoundnews.com (http://www.prosoundnews.com/)

Top of page
Key: 3924