

AUDIO 155
INTRODUCTION TO RECORDING

COURSE LEARNING OUTCOMES (CLOs)

1. Demonstrate a knowledge of terms and basic acoustic principles as they relate to sound production and recording.
2. Demonstrate signal flow using an analog or digital mixing board during both recording and mixdown.
3. Illustrate a working knowledge of microphone types, models, characteristics and suitability to the recording of various instruments.
4. Demonstrate a working knowledge of microphone placement for various instruments.
5. Perform the thirteen step recording procedure in the SFCC control room.
6. Describe the logistics and sequence for a complete recording process from planning the session to final mastering.
7. Describe the process for utilizing compression, gating, reverb and delay during recording and mixdown.
8. Create a reasonable headphone mix for the musicians being recorded.

COURSE OUTLINE

- I. Intro to recording theory
 - A. Acoustics
 - B. Terminology/definitions
 - C. Studio design and construction
- II. Signal flow
 - A. System signal flow
 - B. Mixing board layout
 - C. Basic mixing board signal flow
 - D. Mixing board signal flow lab
- III. Signal flow for recording
 - A. Terminology/diagram
 - B. SFCC control room board overview
 - C. Signal flow test
- IV. The thirteen-step procedure
 - A. Input strip
 - B. Sub master section
 - C. Monitor strip
 - D. Master section
 - E. 13-step procedure lab
- V. Multitrack recording theory
 - A. MCI 16-track
 - B. Auto locator
 - C. 13-step written test
 - D. 13-step procedure practical test
 - E. Synthesizer recording lab
- VI. Microphones

- A. Design and types
 - B. Polar patterns
 - C. Frequency response
 - D. Specifications
 - E. Micing techniques and choices
 - F. Mics/recording lab: drums, guitar, piano
- VII. More on Microphones
- A. Micing techniques and choices
 - B. Microphones quiz
- VIII. Signal processing and effects
- A. Domains of outboard gear
 - B. VGAs
 - 1. Compression
 - 2. Gates
 - 3. Limiters
 - 4. Expanders
 - 5. Processing lab
- IX. Session planning and procedure
- A. Session planning
 - 1. Review set-up procedures
 - 2. Tracking sheets
 - 3. Microphone choices
 - 4. Headphones and mixes
 - B. Session procedure
 - C. 13-step review
 - D. TAC Review
 - E. Compression review
- X. Multi-track recording session – full band
- A. Set-up and record basic tracks
 - B. Punch-in and overdub procedure
 - C. Overdub sessions/lab
- XI. Mixdown and critical listening
- A. Outboard gear and effects, reverb, delay, etc.
 - B. Equalization
 - C. Critical listening/earobics
 - D. Preparing for Mixdown
 - E. Mixdown demonstration
 - F. Mix critiques
- XII. Review and finals