MUS A261: RECORDING TECHNIQUES 1

Item	Value
Curriculum Committee Approval Date	12/08/2021
Top Code	100500 - Commercial Music
Units	3 Total Units
Hours	90 Total Hours (Lecture Hours 36; Lab Hours 54)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	Yes
Basic Skills	Not Basic Skills (N)
Repeatable	No
Grading Policy	Standard Letter (S), • Pass/No Pass (B)

Course Description

A course in recording studio techniques based upon Pro Tools HD. An introductory workshop for musicians and sound engineers who will record, edit and produce live performances in a studio environment. Included is analysis of studio acoustics, vocal and instrumental recording and mixing board characteristics. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. Design and set up a recording array for a typical rock band.
2. Produce a multi-track recording session and mix down to a final stereo product.
3. Analyze and identify problems in a multi-track recording session.

Course Objectives

- 1. Explain differences between microphones and microphone audio patterns
- 2. Demonstrate various microphone arrays for both vocal and instrumental music
- 3. Demonstrate the use of sound baffles in a studio setting
- 4. Demonstrate multi-track recording techniques
- 5. Demonstrate mix down techniques
- 6. Diagram a signal flow chart through a mixing board
- 7. Identify various signal processors including; a. Reverb b. Flange c. Doubling d. Compression e. Limiting f. Delay g. Chorusing
- 8. Demonstrate overdubbing technique

Lecture Content

1. Introduction to musical acousticsa. The nature of soundb. Measuring soundc. Loudnessd. Reverberatione. The ear 2. Introduction to digital audio theory and terminologya. The analog signalb. The digital signalc. Samplingd. Quantizing 3. Introduction to recording studio equipmenta. Microphonesb. Analog mixing consolesc. Sound processingd. Loudspeakers and monitoringe. Equipment maintenance 4. Introduction to recording techniquesa. The spoken wordb. Classical musicc. Popular musicd. Electronic musice. The role of the producerf. The role of the engineerg. The role of the musician/artist 5. The consumer producta. Post-production 6. Compact disc processing 7. Allied mediaa. Radio broadcastingb. Televisionc. Videod. Filme. Theatref. Multimedia 8. Student projectsa. Instructor produced demonstration recordingb. Assigning studio rolesc. Producerd. Engineer(s)e. Musician(s)f. Additional support staffg. Student produced recordings9. Advanced use of recording studio equipmenta. Microphonesb. Multi-channel mixing boardc. Digital effects units 10. The role of the producer, engineer and musician/artist revisiteda. Advanced Student projects 11. Assigning studio rolesa. Producerb. Engineer(s)c. Musician(s)d. Additional support staff 12. Student produced recordings

Lab Content

See Course Content.

Method(s) of Instruction

- Lecture (02)
- Lab (04)

Instructional Techniques

Detailed lecture/demonstrations. Hands-on recording studio work. Instructional videos, live performances and occasional guest speakers.

Reading Assignments

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Writing Assignments

Students must demonstrate proficiency in recording studio terminology and techniques to the instructors satisfaction to complete the course.

Out-of-class Assignments

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Demonstration of Critical Thinking

Successful completion of individual student projects; periodic written testing

Required Writing, Problem Solving, Skills Demonstration

Students must demonstrate proficiency in recording studio terminology and techniques to the instructors satisfaction to complete the course.

Textbooks Resources

1. Required Borwick, J.. Sound Recording Practice, latest ed. New York: Oxford University Press, 2001 Rationale: .