MUS 0015 - AUDIO RECORDING

Catalog Description

Advisory: Completion with grade of "C" or better or concurrent enrollment in MUS 14
Hours: 72 (54 lecture, 18 laboratory)
Description: Studio media content production techniques with targeted training on capture of individual instrumental and vocal sources. Coverage of analogue and digital multi-track recording techniques. Overview of basic and essential audio concepts. Opportunity for practical implementation of signal processing techniques and use of related technology such as digital signal processing. Small group multi-track projects will be required. (CSU)

Course Student Learning Outcomes

- CSLO #1: Demonstrate the ability to implement appropriate audio capture devices (DI interface, microphones, etc.) for different input sources.
- CSLO #2: Demonstrate the ability to capture, route, and combine audio signals on a multi-input recording system.
- CSLO #3: Formulate a plan addressing the needs of a musical act to be implemented in a multi-track recording session.

Effective Term

Spring 2021

Course Type

Credit - Degree-applicable

Contact Hours

72

Outside of Class Hours

90

Total Student Learning Hours

162

Course Objectives

Lecture Objectives:
1. Demonstrate the ability to apply a working knowledge of:
a. Sound characteristics and environmental acoustics
b. Sound as an electrical signal, applicable capture devices, and formats
c. Electrical noise sources and abatement
2. Recommend appropriate capture devices for varied acoustic and electric input sources
3. Distinguish differences and similarities between analogue and digital recording media
Laboratory-Activity Objectives:
1. Prepare and conduct an actual recording session following procedures introduced including equipment set up and tear down, tracking, basic post production techniques, and session documentation
2. Properly route and process external, parallel, and serial signals through the various sections of a recording console
3. Assess input sources and modify to achieve professional line levels through the use of pre-amplification
4. Identify and eliminate sources of electrical and signal noise

General Education Information

- Approved College Associate Degree GE Applicability
- CSU GE Applicability (Recommended-requires CSU approval)
- Cal-GETC Applicability (Recommended - Requires External Approval)
- IGETC Applicability (Recommended-requires CSU/UC approval)

Articulation Information

- CSU Transferable

Methods of Evaluation

- Objective Examinations
  - Example: 1. Students will be given brief spot quizzes on basic and essential audio concepts 2. A comprehensive final examination will also be administered to assess students' ability to quickly locate and identify various recording system components
- Projects
  - Example: Projects: 1. Signal management exercises: Students: will demonstrate the ability to conduct a recording session that shows evidence of output signal processing (e.g. artificial reverberation to simulate virtual acoustic space), proper tracking techniques, and session documentation. 2. Recording session: Small, randomly-assigned student groups will be assembled and set to the early-semester task of recruitment of a music al act to bring in for a late-semester recording session. The group will be responsible for the following: A. Session scheduling B. Session preparation C. Load-in D. Session setup E. Signal routing and level setting F. Tracking G. Overdubbing H. Mixing I. Creation of a stereo master J. Archival to magnetic, optical, solid-state, or other media K. Teardown, cleanup, equipment maintenance, and restoration of the facility to the its original state L. Load-out
- Skill Demonstrations
  - Example: 1. Students will be asked to take a given audio signal source, route it to one channel of a recording console, attain and maintain professional line level, and A. route signal in a parallel fashion through an outboard processor to simulate virtual acoustic spaces B route the same signal in a serial fashion through an outboard dynamics processor to achieve automated level control 2. Students will be assigned recording projects - Session management and finished media content will be used for assessment

Repeatable

No

Methods of Instruction

- Laboratory
- Lecture/Discussion
- Distance Learning

Lab:

1. Laboratory and/or activity:
2. Students will be engaged in audio signal routing, management, and processing exercises
3. Under instructor supervision, small student groups (maximum – 5) will conduct a full recording session including setup, tracking, and basic post production

Lecture:

1. Instructor will offer integrated lecture and demonstration on the nature of various external signal sources typically found in both studio, and on-location recording scenarios. Instructor will guide classroom discussion and activity.
2. Instructor will offer integrated lecture and demonstration of both linear and non-linear multi-track recording techniques. Students will be asked to compare finished projects with each other in discussion and instructor will provide feedback as necessary.

Typical Out of Class Assignments Reading Assignments

1. Students are required to read and report on an article or technical publication on a piece of recording equipment 2. Students will read spec sheet data make and comparisons on comparable professional audio products.

Writing, Problem Solving or Performance

1. Students will write three concert reports focusing on venue acoustic properties and/or sound reinforcement/on-location recording issues as applicable 2. Students will apply understanding of recording techniques by conducting an actual recording session.

Other (Term projects, research papers, portfolios, etc.)

Students will produce a demonstration recording of recording sessions conducted under the instructor's supervision.

Required Materials

- Practical Recording Techniques
  - Author: Bartlett, Bruce and Jenny
  - Publisher: Focal Press
  - Publication Date: 2013
  - Text Edition: 6th
  - Classic Textbook?: No
  - OER Link:
  - OER:
- Modern Recording Techniques
  - Author: David Miles Huber and Robert E. Runstein
  - Publisher: Sams Publishing
  - Publication Date: 2010
  - Text Edition: 7th
  - Classic Textbook?: No
  - OER Link:
  - OER:

Other materials and-or supplies required of students that contribute to the cost of the course.