Syllabus

MUS 170 Techniques of Audio Recording I

General Information

Date

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Author

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Department

Visual and Performing Arts

Course Prefix

MUS

Course Number

170

Course Title

Techniques of Audio Recording I

Course Information

Credit Hours

3

Lecture Contact Hours

4

Lab Contact Hours

0

Other Contact Hours

0

Catalog Description

A study of mixer formats, patch bays, decibels, acoustics, and microphones. Emphasis is on gaining practical knowledge through working with recording equipment. Consideration is also given to production concepts and aesthetics. Students will work on both studio and field recording projects.

Key Assessment

This course contains a Key Assessment for the AS Music Recording Technology program

Prerequisites

None

Co-requisites

MUS 106

Grading Scheme
Letter

First Year Experience/Capstone Designation

This course is designated as satisfying the outcomes applicable for status as a
First Year Experience

SUNY General Education

This course is designated as satisfying a requirement in the following SUNY Gen Ed category
None

FLCC Values

Institutional Learning Outcomes Addressed by the Course

Inquiry
Perseverance

Course Learning Outcomes

Course Learning Outcomes

1. Operate basic studio equipment (microphones, patchbay, basic console navigation during the recording process, setting up a session and recording using industry standard software)

2. Practice basic skills within Avid's Pro Tools software (e.g. file management, internal/external routing, basic transport control).

3. Differentiate, through critical listening, microphones in a variety of situations.

4. Identify problems such as distortion and phasing.

Outline of Topics Covered

- Introduction to the program, roles of an audio engineer in today's society.
  - Career paths
- The Fundamentals of Sound

- Characteristics of Waveforms
- Harmonic content
- Introduction to Acoustics and Psychoacoustics
  - The perception of sound
  - Waveform propagation through various mediums
  - Modern Recording Studio Design
- Computer Basics
  - Avid's Pro Tools basic operation and file management
- Microphone Design & Application
  - Dynamic, Ribbon, and Condenser types
  - Polar patterns
  - Stereo Configurations
- Signal Flow in the Modern Recording Studio
  - Multitrack Machines (past & present best practices)
- Introduction to Digital Audio
  - Analog to Digital Conversion (bit depth, sample rate, Nyquist theorem)
- Recording Session Basics – Planning and Organization