

MTEC 51C: STUDIO RECORDING III

Foothill College Course Outline of Record

Heading	Value
Effective Term:	Summer 2023
Units:	4
Hours:	3 lecture, 3 laboratory per week (72 total per quarter)
Degree & Credit Status:	Degree-Applicable Credit Course
Foothill GE:	Non-GE
Transferable:	CSU
Grade Type:	Letter Grade (Request for Pass/No Pass)
Repeatability:	Not Repeatable

Description

Advanced recording studio techniques, concepts, and creative elements of professional music production. Advanced microphone techniques and acoustics. Planning and pre-production, studio teamwork, collaborating with musicians in the role of producer/engineer. Mixing, mastering, post-production used in professional digital media content creation workflows. Utilizing analog and digital audio equipment in complex hybrid configurations. Successful completion of this course will prepare students for internship or entry-level employment position in a recording studio, audio for post facility, or mastering facility.

Course Objectives

The student will be able to:

1. Set up complex recording sessions with multiple microphones
2. Measure and calibrate frequency response for audio control rooms
3. Configure advanced headphone cue mixes
4. Troubleshoot advanced digital audio hardware and software systems
5. Communicate and collaborate with professional recording artists
6. Produce master quality work suitable for commercial distribution

Course Content

1. Resolution and harmonic distortion of A-to-D (analog-to-digital) converters
2. Acoustics of sound as related to audio recording and control room monitoring
3. Loudness metering for international broadcast compliance
4. Simultaneous use of multiple rooms, and acoustic environments, for advanced recording techniques of large performance ensembles

Lab Content

1. Tutorials on advanced applications with audio recording equipment
2. Reverse-engineer commercial recordings
3. Spectrum analysis of audio files and acoustic environments

4. Practice recording, mixing, and mastering large projects with over 48 discreet audio tracks
5. Archive digital audio files according to professional standards

Special Facilities and/or Equipment

1. When taught on campus: Macintosh computers, MIDI keyboards, and MIDI interface; video projector and screen; Pro Tools software; Reason software.
2. When taught via Foothill Global Access: on-going access to computer with email software and capabilities, email address, JavaScript-enabled internet browsing software.

Method(s) of Evaluation

Methods of Evaluation may include but are not limited to the following:

- Graded lab assignments
- Quizzes and comprehensive final examinations
- Hands-on practical exams operating equipment
- Final project demonstrating integrated advanced audio recording techniques

Method(s) of Instruction

Methods of Instruction may include but are not limited to the following:

- Lecture presentations and demonstrations of advanced audio recording techniques
- Guided listening exercises of commercially mixed and mastered record albums
- Group presentations of student projects followed by in-class discussion

Representative Text(s) and Other Materials

Huber, David. *Modern Recording Techniques, 9th ed.*. 2017.

Although this text is older than the suggested "5 years or newer" standard, it remains seminal in this area of study.

Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

1. Written critiques and analyses of audio production projects, including albums, soundtracks, television, video games, and internet multimedia
2. Written summaries documenting technical and artistic elements for corresponding submitted assignments and audio projects
3. Written proposals, session logs, learning outcomes, and reflections supporting submitted musical works and final master recordings

Discipline(s)

Commercial Music