

# MTEC 57A: SOUND DESIGN FOR FILM & VIDEO

## Foothill College Course Outline of Record

Heading	Value
<b>Units:</b>	4
<b>Hours:</b>	3 lecture, 3 laboratory per week (72 total per quarter)
<b>Advisory:</b>	Not open to students with credit in MDIA 81B, MUS 81B or VART 81B.
<b>Degree &amp; Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade (Request for Pass/No Pass)
<b>Repeatability:</b>	Not Repeatable

## Description

Creating, editing, and mixing audio for film and video. Understanding aesthetic qualities of sound effects and music as they relate to story. Recording original sound elements and using commercial sound libraries. Editing, layering, and processing sound elements to create complex sound effects. Synchronizing audio to video using a digital audio workstation. Basics of mixing and mastering finished soundtracks for digital distribution.

## Course Objectives

The student will be able to:

- Understand basic physics of sound terminology; the sound wave, frequency/pitch, amplitude/loudness, phase, and timbre.
- Comprehend acoustics; microphone classification, placement and use; theory and practical use of consoles, computers and software; analog/digital recording and storage devices; patching; editing; time code; signal processors; loudspeakers.
- Analyze audio from an existing film or video project.
- Explore the emotional and physical perception of music, voice and sound and the aesthetics of audio mixing.
- Operate a digital audio workstation, such as Pro Tools, in a studio environment.
- Create sound effects and original sound clips for dynamic media.
- Evaluate and conduct both destructive and nondestructive waveform editing procedures.
- Assess the comparative levels of tracks as they relate to the multitrack recording as a whole.
- Output a final mix in a format that is appropriate for digital distribution.

## Course Content

- Study and analysis of audio in the digital video environment.
  - Synchronizing audio to video.
  - Editing techniques for dialog, music, sound effects, and ambient sound.
  - Basic mixing concepts including automation and metering.
  - Routing signals for stereo mixing and stem export.
  - Exporting finished audio for integration in digital media projects.
- Planning and assembly of video/audio projects.

- Overview of the process of pre-production, production and post-production in digital audio, multi-track linear and non-linear editing digital input and output options.
- Acquiring sound effects assets through recording or commercial libraries.
- Study and analysis of digital media video and recordings.
  - Traditional film audio and the history of sound in film.
  - Contemporary audio techniques in the digital domain.

## Lab Content

Lab content includes topics such as digital audio workstation setup, working with studio equipment and field recording devices to record original sounds, searching commercial sound libraries for appropriate sound elements, editing sounds to create complex sound effects, synchronizing sounds to picture, signal flow and routing to prepare to mix soundtracks, mixing, mastering and outputting final files for standard distribution formats. Participate in group and individual project work to produce digital projects while exploring audio production applications and media sound design for broadcast, web, live and other distribution methods.

## Special Facilities and/or Equipment

- When taught on campus:
  - Classroom with 30 Apple iMacs.
  - Appropriate digital audio workstation software.
  - Projection system for video and multimedia content.
- When taught via Foothill Global Access:
  - On-going access to computer with email software and capabilities.
  - Computer capable of running current Windows or Mac OS.
  - Appropriate digital audio workstation software.
  - Email address.
  - Current internet browsing software.

## Method(s) of Evaluation

- Written assignments that analyze, compare and contrast different audio and video techniques.
- Designing and assembling a multitrack recording for video production.
- Producing video projects that include edited audio.
- Participation in classroom discussions related to course topics required.

## Method(s) of Instruction

- Lecture presentations and classroom discussion of the techniques for producing soundtracks for film and video.
- In-class listening to historically significant soundtracks followed by instructor-guided interpretation and analysis.
- Presentations of major sound design projects followed by in-class discussion and evaluation.
- Demonstration of techniques for the recording, editing, and mixing of soundtracks.

## Representative Text(s) and Other Materials

Yewdall, David Lewis. *Practical Art of Motion Picture Sound*. Waltham, MA: Focal Press, 2012.

Darnell, Andy. *Designing Sound*. Cambridge, MA: MIT Press, 2010.

Viers, Rick. The Sound Effects Bible. Studio City, CA: Michael Wiese Productions, 2008.

Woodhall, Woody. Audio Production and Postproduction. Burlington, MA: Jones & Bartlett Learning, 2010.

Jay Rose. Producing Great Sound for Film and Video. Waltham, MA: Focal Press, 2014.

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

- A. Written critiques of sound design projects for film and video.
- B. Written summaries documenting technical and creative aspects of course assignments.
- C. Written proposals, session logs, learning outcomes and reflections supporting creative works and final master recordings.

## **Discipline(s)**

Commercial Music