

MTEC 60A: PRODUCING IN THE HOME STUDIO I

Foothill College Course Outline of Record

Heading	Value
Effective Term:	Summer 2021
Units:	4
Hours:	4 lecture, 1 laboratory per week (60 total per quarter)
Advisory:	Not open to students with credit in MUS 60A.
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

Design, set up and operation of an audio/video recording studio in a small environment. Space considerations, electrical requirements and acoustic treatment options. Computer requirements including processor speed, memory requirements, data storage devices and monitor selection/ placement. MIDI keyboard types and compatibility, mixer selection and setup, cable selection and care, microphone design, and USB/firewire interface options. Software programs and compatibility issues. How to produce recordings from start to finish in a home studio.

Course Objectives

The student will be able to:

- Design an acoustic environment in an alternative space.
- Create a recording/production system using computer based software and hardware.
- Integrate MIDI keyboards and sound modules into the production system.
- Integrate non-digital equipment such as microphones and transducers into a digital production system.

Course Content

- Basic principles of studio design and construction.
 - Acoustic treatments.
 - Voltage and wiring considerations.
- Audio hardware design and selection.
 - Analog vs. digital mixers.
 - Cables, microphones and peripheral accessories.
 - USB and Firewire audio interfaces.
 - MIDI keyboards and interfaces.
- Computer design and selection.
 - Bus speed and track count.
 - Cables, microphones and peripheral accessories.
 - USB and Firewire audio interfaces.
- Software selection and use.
 - Audio based production software.
 - MIDI based production software.
 - Audio/video based production software.

Lab Content

Lab content in online music technology courses includes:

- Lab assignments and experimentation with variances in areas such as formatting media bit rate, sample rate, and media size.
- Assignments in number of plug-ins per insert track.
- Bus assignments for efficient recording operation.
- Mastering compression settings.

Special Facilities and/or Equipment

- When taught on campus:
 - 30 Macintosh computers.
 - 30 MIDI keyboards and MIDI interfaces.
 - 30 Avid M-Box USB audio interfaces.
 - 30 Pro Tools software installs.
 - Video projector and screen.
- 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

Evaluated studio designs
 Weekly quizzes and skills checks
 Written evaluations of software and hardware combinations
 Graded recording assignments in various formats
 Midterm and final exams

Method(s) of Instruction

Written assignments that analyze, compare and contrast different audio recording and editing techniques
 Designing and assembling a multitrack recording for mastering
 Producing audio projects that include edits to the basic tracks, as well as appropriate plug-ins, such as compression

Representative Text(s) and Other Materials

Owsinski, Bobby. The Recording Engineer's Handbook, 4th ed.. 2017.

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

- Read the specification sheet for an audio software program and provide a written interpretation in layman's language.
- Write a tutorial on setting up various aspects of a home studio, such as the MIDI keyboard wiring matrix.

Discipline(s)

Commercial Music