

MTEC 50A: INTRODUCTION TO MUSIC TECHNOLOGY

Foothill College Course Outline of Record

Heading	Value
Effective Term:	Summer 2021
Units:	4
Hours:	3 lecture, 3 laboratory per week (72 total per quarter)
Advisory:	Not open to students with credit in MUS 66A.
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

Introduction to creating music with computers, keyboards, audio samples and beats using Pro Tools and other digital audio workstations. Basic principles and use of MIDI sequencing/audio software. Songwriting, musical composition, mixing, mastering and the basic elements of music (pitch, rhythm, harmony, style and form) as they relate to contemporary music. Basic music production using DAWs (Digital Audio Workstations). General computer literacy and media management. All styles are included, and prior musical training is not required.

Course Objectives

The student will be able to:

- Explain the basic components of MIDI systems (Musical Instrument Digital Interface).
- Write original compositions using a MIDI/audio workstation.
- Define and discuss the aesthetic qualities of music using contemporary media.
- Create unique programming/sequencing that includes the linking of patterns into a musical composition, and the inclusion of audio files as an integral element.

Course Content

- Study and analysis of digital workstation production techniques.
 - Audio editing and conversion.
 - Basic mixing and editing.
 - Application of basic audio plug-ins and Audio Suite FX.
- The MIDI protocol and its implementation.
 - The use of MIDI as a control protocol.
 - The application of synthesizers in a musical context.
 - Basic synthesis patch and pattern design.

Lab Content

- MIDI.
 - Implementation and drivers.
 - Velocity and aftertouch.
 - Multiple routing assignments.
- Virtual instruments.

- Layering.
- Volume matching.
- Panning.
- Audio.
 - Tempo matching via time compression expansion.
 - Elastic audio.
- ReWire.
 - ReWiring secondary applications via insert tracks and bus assignments.
 - Plug in applications using internal busses affecting external applications.

Special Facilities and/or Equipment

- When taught on campus:
 - Macintosh computers, MIDI keyboards and MIDI interface.
 - Video projector and screen.
 - Pro Tools software.
 - Reason software.
- 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:

- Written musical assignments that compare/contrast compositional techniques in the digital domain
- Preparing digital sequences from a set of specifications for application in a digital environment, and evaluated from those specifications
- Tests on the MIDI protocol
- Graded lab assignments that demonstrate defined skills in the operation of audio editing software and MIDI sequencers

Method(s) of Instruction

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

- Lecture presentations that demonstrate digital audio workstation production techniques
- Classroom discussions that address the history of audio production and modern editing techniques
- Student group presentations followed by in-class discussion and evaluation

Representative Text(s) and Other Materials

Hosken, Dan. [An Introduction to Music Technology, 3rd ed.](#). 2019.

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

- Written critiques and analyses of audio production projects, including albums, soundtracks, television, video games and internet multimedia.
- Written summaries documenting technical and artistic elements for corresponding submitted assignments and audio projects.

C. Written proposals, session logs, learning outcomes and reflections supporting submitted musical works and final master recordings.

Discipline(s)

Commercial Music