

# MTEC 70C: PRO TOOLS 201- AVID CERTIFICATION

## Foothill College Course Outline of Record

Heading	Value
<b>Effective Term:</b>	Summer 2023
<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 MUS 82C.
<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

Avid Pro Tools Certified training material covers concepts and skills needed to operate Pro Tools in a professional recording studio environment. Introduction to Pro Tools HD system configurations. Pro Tools HD features, including control surfaces, automation, advanced editing, mixing, hardware setup, and session management. Practical examples and experience with exercise files from professional music, film, and TV productions. Required course for Avid Pro Tools Operator Level Certification. Prepares for enrollment in Pro Tools 300 Expert Level Certification courses.

## Course Objectives

The student will be able to:

- Configure Pro Tools HD workstations, customizing session requirements
- Demonstrate multi-format session management techniques
- Perform advanced digital audio editing techniques, including selection techniques, time operations, and media alignment
- Write automation in any mode, automate plug-ins, and suspend automation
- Operate a music production project with over 128 tracks of real time streaming digital audio

## Course Content

- Study and analysis of Avid 201-level approved curriculum
  - Advanced multitrack editing using voltage controlled amplifiers and region groups
  - Application of AAX plug-in effects using expanded buss architecture of larger Pro Tools systems
  - Digital audio concepts, sound frequency, amplitude, sample rate, and quantization
  - Mixing techniques, including compensation for DSP-induced latency and digital audio engine buffers
  - Track signal flow as applied to large scale production environments

- Advanced automation only available on Pro Tools HD hardware configurations
- Instrument tracks and virtual instruments within the Pro Tools environment

## Lab Content

- Track count
- Elastic audio settings and rendering levels
- Plug-in and bus considerations
- Insert tracks and routing importing and exporting file types
- Bit rate encoding
- Bouncing audio to disk
- Consolidating audio regions, etc.
- Other items may include subjects such as number of plug-ins per insert track, bus assignments for efficient recording operation, and mastering compression settings

## Special Facilities and/or Equipment

- When taught on campus: classroom with Pro Tools HDX recording system and 16 channel audio interface, digital control surface, classroom with 30 Pro Tools Native recording systems, 30 Apple iMacs, Apple Macintosh Mac Pro with at least 8GB of RAM and 24 inch monitor, projection system for video and multimedia content.
- 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 assignments that analyze, compare, and contrast Pro Tools production techniques  
 Designing and assembling a master production that demonstrates an understanding of the Pro Tools environment  
 Tests on workflow, file management, DSP allocation, and digital audio theory as presented in the Pro Tools 201 curriculum

## Method(s) of Instruction

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

Lecture presentations and classroom discussion of the techniques for producing audio in Pro Tools  
 In-class viewing of Pro Tools sessions followed by instructor-guided interpretation and analysis  
 Presentations of major music and post-production projects followed by in-class discussion and evaluation  
 Demonstration of techniques for recording, editing, and mixing audio in Pro Tools

## Representative Text(s) and Other Materials

Cook, Frank. *Pro Tools 201*. 2021.

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

- a. Written critiques and analyses of audio production projects, including albums, soundtracks, television, video games, and internet multimedia
- b. 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