

# An Introduction to Pro Audio

## Summer 2009

*Instructor:* Paul Leary 216.215.4262  
e-mail: paul.leary@duke.edu

*Class:* Monday-Friday

*Materials:* Logic Pro (Logic Studio), Amadeus Pro

*Goal:* While Pro Tools remains the most widely used digital audio workstation for professional musicians, of recent, Apple's Logic Pro has gained in popularity due to its wide array of included software instruments and compositional tools for a relatively low price. This course will offer educators an extensive introduction into the Logic Pro 8 platform including the packaged software instruments and effects. In addition, we will explore through Logic Pro the basic principles of digital audio, learning the basics of audio editing and how to use the most widely used Logic plugins such as Space Designer, GoldVerb, Stereo Delay, chorus, Multipressor, distortion, tremolo, and more. Projects in this workshop will be designed by the participants to most effectively address specific uses of Logic Pro in their field. This includes scoring and mixing music for film, editing music for use in a sound/art installation, editing/combining music for dance performance, or composing music on the Logic Pro platform. In addition, we will spend significant time learning basic techniques for audio field recording and how to use such recordings in your mixes.

### DAY 1: MONDAY, JUNE 8

***Introduction: The Basics of Digital Audio***

9-10:15am: Technology: *What is digital audio. Midi Terminology and Audio Formats*

Break

10:30-12:00pm: Software: *Amadeus Pro, Logic 8*  
Audio recording: *Marantz Portable Recorders, AT825  
Cardioid Microphone*

DAY 2: TUESDAY, JUNE 9

**Introduction: *The Basics of Digital Audio Editing***

9-10:15am: Editing audio in Amadeus Pro  
Cutting, Pasting, and Merging audio, etc.

Break

10:30-12:00pm: The Logic 8 platform.  
*The Arrange Window*  
*Audio and Midi*  
*Working with Loops*

**Assignment:** Spend some time getting to know the Logic platform. Start working on a short project of any kind. Try to use both midi and audio in this project.

DAY 3: WEDNESDAY, JUNE 10

12:30-1:30pm: **Editing audio in Amadeus Pro**  
*VST and Audio Unit Plugins*

Break

1:45-3:30pm: The Logic 8 platform.  
*Plugins: Reverb, delay, tremolo, chorus*

DAY 4: THURSDAY, JUNE 11

***Like a Thief in the Night!***

9-10:15am: Capturing Audio and video from your Internet browser.

Break

10:30-12:00pm: The Logic 8 platform.  
*Recording a Live Instrument*  
*Comping live recordings*

**Assignment:** Find a video from any source that interests you, we will be working with it in the next few days. Look for something that you are interested in editing the audio in some way.

DAY 5: FRIDAY, JUNE 12

**Video**

12:30-1:30pm: The Logic 8 platform.  
*Importing Video*  
*Extracting Audio from Video*

Break

1:45-3:30pm: The Logic 8 platform.  
Working with a midi keyboard.  
*Software instruments: Sculpture, Ultrabeat, EXS24*  
The metronome

**Assignment:** Continue working with your video.

**Assignment:** Read: "Microphone Techniques" (PDF)

**Week 2**

DAY 6: MONDAY, JUNE 15

9-10:15am: **Microphones**  
Dynamic, and Condenser Mics  
Mic positions, recording techniques.

Break

10:30-12:00pm: The Logic 8 platform.  
**Advanced Midi and Audio Editing**  
*Transform, Automaton, Hyper Editor, Hyper Draw*

**Assignment:** Continue working on projects.

DAY 7: TUESDAY, JUNE 16

9-10:15am: Project workshop

Break

10:30-12:00pm: The Logic 8 platform.  
*EQ, Compression, Mixing, Bouncing*

DAY 8: WEDNESDAY, JUNE 17

9-10:15am: Project Workshop

Break

10:30-12:00pm: The Logic 8 platform.  
*Waveburner*

DAY 9: THURSDAY, JUNE 18

9-10:15am: Project Workshop

Break

10:30-12:00pm: Open

Break

12:30-3:00pm: Final Presentations