

Recording Workshops

May 23-26 and June 13-16, 2022

Welcome

This 4-day workshop is a hands-on learning experience in the recording studio, covering the fundamentals of sound science, digital audio, gear and signal flow, recording, mixing, and mastering for music and media.

Designed and Taught by
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Assistant Engineers
Seth Blitstein
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CoM Computer Lab Supervisor
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Learn More at lab.music.unt.edu

Overview



Schedule:

Monday - Thursday 10:00am - 4:00pm

Day 1: Principles of Audio & Intro to DAWs

Day 2: Microphones & Recording Techniques

Day 3: Recording Music, ADR, Foley, and more

Day 4: Editing, Mixing, and Mastering

In this Packet:

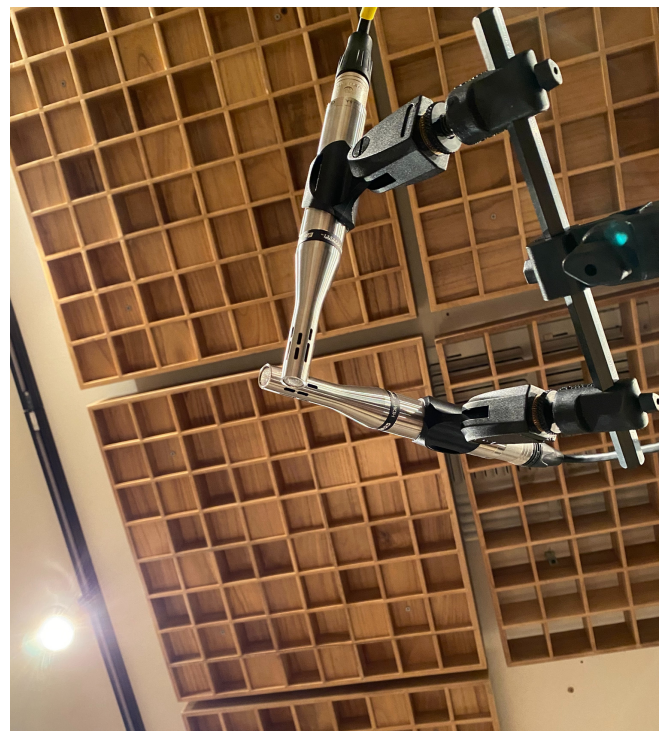
Daily Schedule Outline

Day 1: DAW Project Instructions

Glossary of Audio Terminology

Recording Equipment Guide

Additional Resources for Continued
Education, Gear, and Recording
Techniques



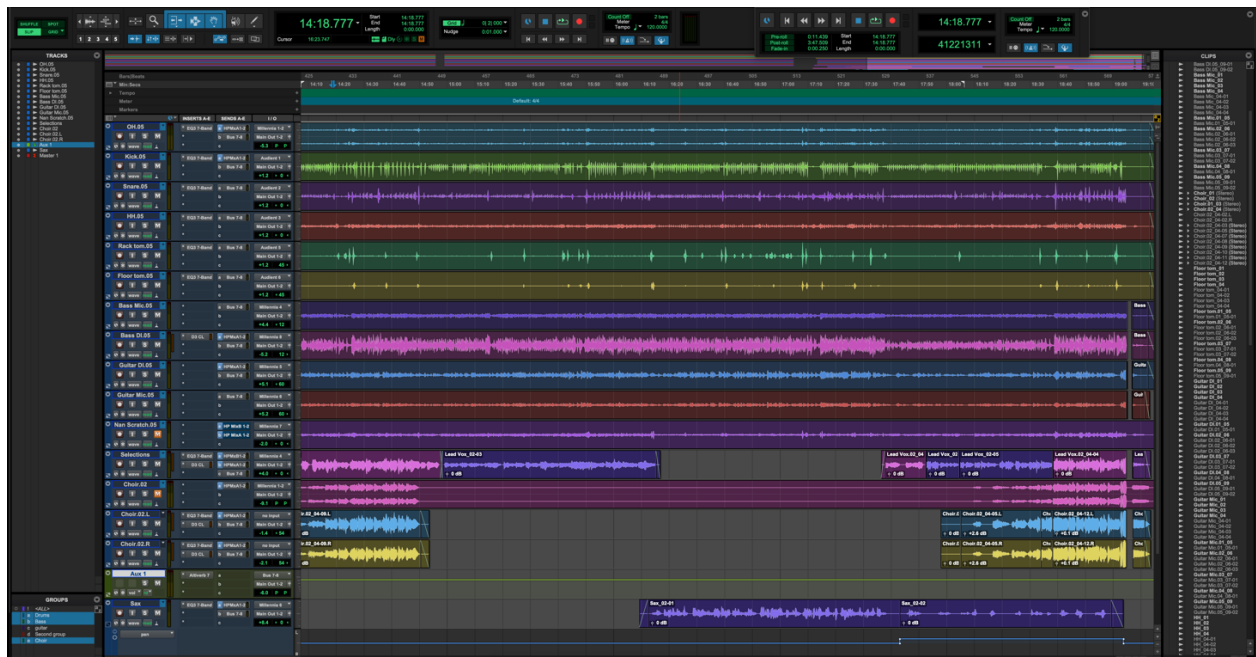
RECORDING WORKSHOPS

Schedule

Day 1

PRINCIPLES OF AUDIO & INTRODUCTION TO DAW'S

Presentation and discussion on Basics of Sound Science, Principles of Digital Audio, and the Digital Audio Workstation – Pro Tools, followed by a short independent DAW project.



Schedule

10:00-11:00am Workshop Introduction & Basics of Sound Science

11:00-12:00pm Introduction to DAW's – Pro Tools

12:00-1:00pm Lunch Break

1:00-3:00pm Solo/Small Group Independent Project in Media Suite

3:00-4:00pm Share Projects

Day 2

MICROPHONES & BASIC RECORDING TECHNIQUES

Review of signal flow for basic recording setups, equipment for studio/home/live recording, microphone types and techniques, overview of the Lab Studio gear and workflow, followed by hands-on microphone type and placement experimenting.



Schedule

10:00-11:00am Review and Overview of Recording Setup + Equipment

11:00-12:00pm Microphones: Types and Techniques

12:00-1:00pm Lunch Break

1:00-1:30pm Overview of the Lab Studio

1:30-3:30pm In the Studio: Mic Shootout

3:30-4:00pm Debrief & Discuss Day 3 Recording Projects

Day 3

MUSIC, ADR, FOLEY, AND SOUND ART RECORDING

All day hands-on recording in the studio for both small ensemble music groups and foley/sound design/noise art.



Schedule

10:00-10:30am Review and Setup

10:30-12:00pm Small Group 1 Music Recording

12:00-1:00pm Lunch Break

1:00-2:45pm Setup Changes and Small Group 2 Music Recording

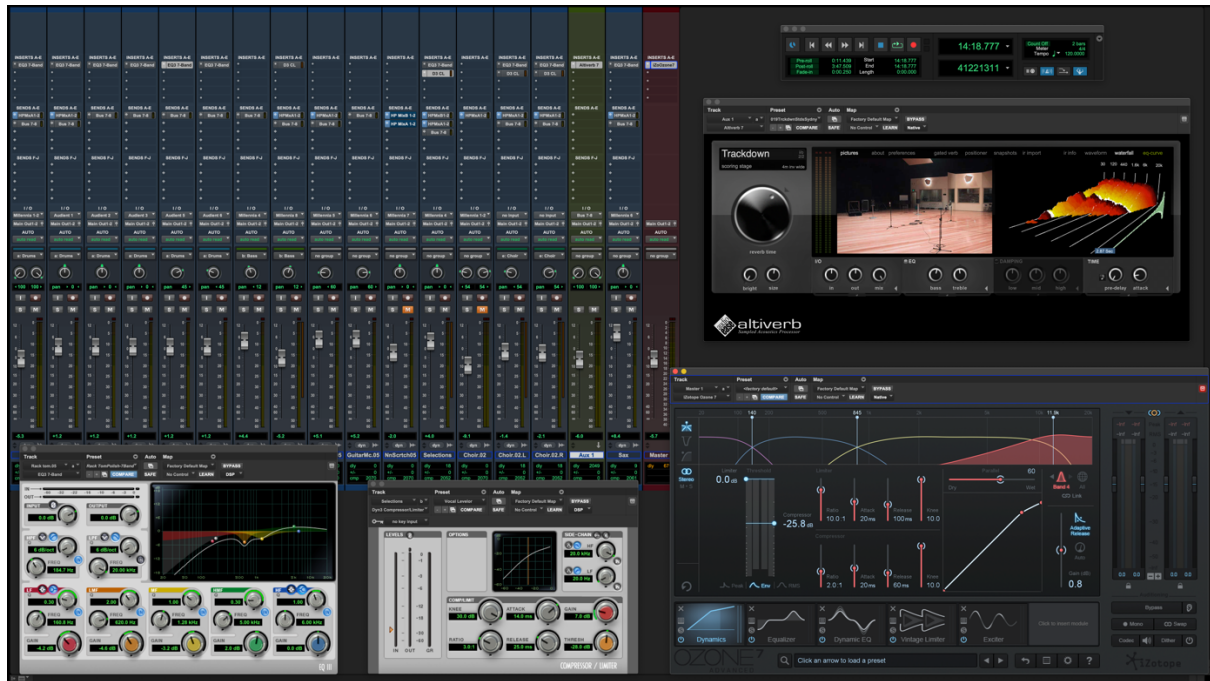
2:45-3:00 Setup Changes

3:00-4:00pm ADR, Foley, Sound Design & Noise Art Recording

Day 4

POST-PRODUCTION

Editing, mixing, and mastering Day 3's projects in Pro Tools, featuring presentations on panning, EQ, compression, pitch-correction, reverb, FX, limiting, and exporting.



Schedule

10:00-10:30am Review

10:30-12:00pm Editing

12:00-1:00pm Lunch Break

1:00-3:00pm Mixing

3:30-3:30 Mastering

3:30-4:00pm Review and Q&A

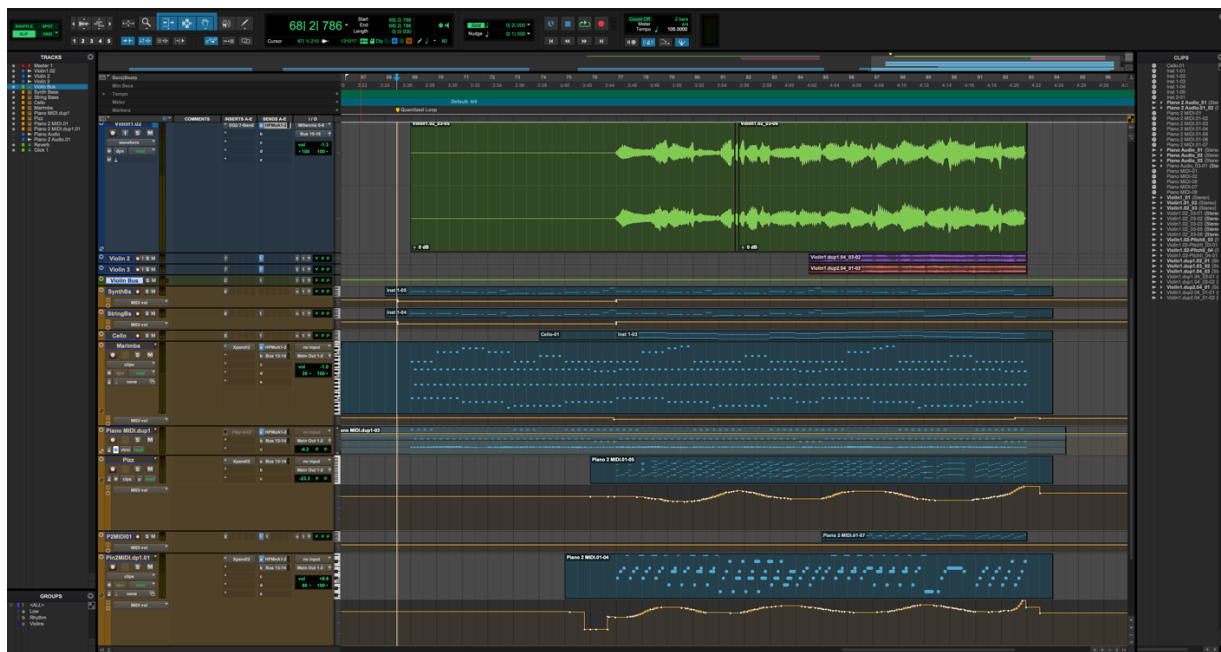
RECORDING WORKSHOP

Day 1: Independent DAW Project

A Unique Composition/Mix in Pro Tools

INSTRUCTIONS

You'll be creating a unique composition/mix using the Digital Audio Workstation Pro Tools* and the provided sound and music libraries



***You can use another DAW of choice if you prefer**

Create a sound/music collage (less than 4 min.):

1. Download sounds or music clips from this royalty-free library:
<https://pixabay.com/sound-effects/>
2. Import into your Pro Tools session (command-shift-I) or File → Import → Audio
 - a. Select “Copy” or “Convert” (if sample rate conversion is necessary)
 - b. Add as new tracks or into your clip list

3. Adjust levels of your sounds using the volume faders for each track
4. Arrange together in your own unique composition or collage by dragging clips around the edit window timeline. Remember, you can trim and cut clips as well as fade in/out or crossfade between clips.

(Optional)

5. You can add Instrument tracks
 - a. Add a software instrument plug-in like Xpand!2 or Mini Grand as an “Insert” on your Instrument Track
 - b. Record Enable
 - c. Play in some melodies on the MIDI keyboard
6. You can add automation
 - a. Volume, panning, etc.

Project Length: less than 4 min.

RECORDING WORKSHOPS

Resources

EDUCATION, GEAR, SAMPLES, PLUG-INS, & TIPS

The UNT CoM Lab Studio

Book recording sessions and tutorials, free to students

<https://lab.music.unt.edu/studio>

Sweetwater InSync

An educational and professional blog on audio gear and techniques

<https://www.sweetwater.com/insync/>

Sample Libraries

- BBC sound library <http://bbcsfx.acropolis.org.uk>
- University of Iowa Music Samples <http://theremin.music.uiowa.edu/MIS.html>
- Converse Sample Library <https://www.conversesamplelibrary.com/> Collection of high quality samples, all free
- Freesound <https://freesound.org>

DAW's

We've used Pro Tools throughout this workshop, but other DAW options may better suit your needs, including Logic or Ableton Live. These do have Student pricing available. If you're not ready to commit, check out Reaper, the free DAW.

- Pro Tools: <https://www.avid.com/pro-tools/audio-recording-software>
- Logic: <https://www.apple.com/logic-pro/>
- Ableton Live: <https://www.ableton.com/en/shop/live/>
- Reaper: <https://www.reaper.fm/>

Plug-ins

- Freeverb: <http://freeverb3vst.osdn.jp/>
- SPAN: <http://www.voxengo.com/product/span/> - Audio analyzer
- Dexed: <https://asb2m10.github.io/dexed/> - DX7 synthesizer emulator
- Surge: <https://surge-synthesizer.github.io>
- GVST: <https://www.gvst.co.uk>
- Glitchmachines Free Bundle: <https://glitchmachines.com/products/free-bundle/>

- Anarchy Rhythms: <https://www.anarchy-rhythms.com>
- BitKlavier: <https://bitklavier.com>
- Alter/Ego: <https://www.plogue.com/products/alter-ego.html>
- Tx16wx <http://www.tx16wx.com/> a nice free sampler

Impulse Responses

- Open Air <http://www.openairlib.net/>
- Echo Thief <http://www.echothief.com>

Mixing and Production Tutorials

- <https://www.youtube.com/user/wickiemedia>
- <https://www.youtube.com/user/recordingrevolution>
- <https://www.youtube.com/user/ADSRtuts> - production tutorials
- <https://www.youtube.com/user/HomeStudioCorner>

Other Gear and Recording Techniques

- Home Recording: <https://ehomerecordingstudio.com/home-recording-studio-essentials/>
- Stereo Pair Techniques: <https://www.shure.com/en-US/performance-production/louder/common-techniques-for-stereo-miking>
- Avoiding Phasing Problems: <https://www.uaudio.com/blog/understanding-audio-phase/>

ARTICLES & BUYING GUIDES FOR AUDIO GEAR

Studio Monitors, Speakers, and Headphones

- Studio monitor buying guide <https://www.sweetwater.com/insync/studio-monitors-buying-guide/>
- Article on what to look for in studio monitors <https://www.theproducerschoice.com/blogs/articles/4968492-choosing-studio-monitors> -
- Article on speaker specifications <http://www.practical-home-theater-guide.com/speaker-specifications.html>
- Article headphone specifications <http://www.shure.com/americas/support/find-an-answer/understanding-earphoneheadphone-specifications>

Understanding Signals and Levels

- Consumer vs. professional line levels and balanced vs. unbalanced signals explained <https://www.bhphotovideo.com/explora/audio/tips-and-solutions/fun-and-good-hu-mored-attempt-demystifying-10-dbv-and-4-dbu>
- Mic, instrument, line, and speaker levels explained <https://www.sweetwater.com/sweetcare/articles/whats-the-difference-between-mic-instrument-line-and-speaker-level-signals/>

Audio Interfaces

- Audio interface buying guide <https://www.sweetwater.com/insync/audio-interface-buying-guide/>

Other Gear

- Cable buying guide <https://www.sweetwater.com/insync/cable-buying-guide/>



Thank you!

Book Sessions and Tutorials at
lab.music.unt.edu/studio

Contact Us at
music.labrecording@unt.edu