

Course Syllabus

Introduction to Digital Audio Workstation Techniques
Topic: **AUDIO RECORDING AND EDITING USING PRO TOOLS**

MUAE 3100-001 (18119)
MUJS 5900 SPECIAL PROBLEMS, section 702 (5440)
RM 322

Fall 2021 — UNT College of Music

Instructor: Robert Trusko, MA robert.trusko@unt.edu
Regular weekly office hours (Zoom meeting ID 274 154 8243)

- Wednesdays 1-3pm
- Individual office hours by appt.

Communicating With Your Instructors

Please use **Discussions** in our Canvas course for all communication with the instructors and your classmates, *unless your communication content needs to be private*.

- Be sure that you are subscribed to all Canvas discussion forums so you can receive notifications of questions and answers that will help you.

For communication including private content, such as your grades, personal struggles related to the class or individual office hours appointments, please email the instructor at robert.trusko@unt.edu.

Receiving Announcements From Your Instructors

Please check Canvas course announcements **and** your UNT email daily, as these are the means by which the instructors will contact you with important information, updates and reminders.

Course Pre-requisites, Co-requisites, and/or Other Restrictions: None.

Course Description: Introduction through intermediate skill development in audio recording, editing, mixing and mastering using the Pro Tools Digital Audio Workstation (DAW) software for Mac or Windows.

Student Learning Outcomes

- Demonstrate basic proficiency as a digital audio engineer, making effective use of the most common tools and keyboard shortcuts in the industry standard Pro Tools DAW.
- Apply a professional workflow and techniques to produce tracks in any genre using audio and software instruments.
- Plan and execute a recording session using microphones and direct line input of musical performances on common instruments.
- Illustrate understanding of basic terms and concepts of sound propagation science, transduction, acoustics, psychoacoustics and signal processing through application to production and post-production techniques.
- Command basic mixing abilities using levels, panning, corrective signal processing

(EQ, compression, etc.) and creative signal processing (reverb, delay, distortion, modulation).

- Implement a basic mastering chain on your stereo output for finalizing your tracks to commercial specs.
- Compile a sharable portfolio online of digital audio projects, including full-length song arrangements.

Teaching Philosophy:

You will learn by doing in this course. The instructor will present tools and demonstrate their use, then you will practice applying the same techniques to create your own original music and sound designs. Each student will produce something unique for every lab assignment and project. You will also learn from each other. Office hour time will be devoted to listening to and discussing student work. You will have the option to work in groups for select assignments.

Format (Canvas-Driven, Flipped)

Fully Online and Canvas-based

- Canvas will be the hub for everything in this course.
- All lectures will be delivered as step-by-step instructional videos accompanied by PDFs.
- All lab and project assignments will be submitted online via Canvas.
- All quizzes will be administered online via Canvas.

“Flipped” vis-a-vis lecture content

- “Flipped” means that the lecture material and assignment will all be given *before* our during class.
- During Class:
 - The instructor will present and give feedback to submitted student assignments
 - The instructor will answer your questions about material you’ve already been introduced to from the pre-recorded lecture videos.

Minimum Technical Skills Needed

Using the Canvas learning management system. Using an online file sharing platform (e.g. Dropbox) for submitting Pro Tools session folders.

Class Materials

The following materials are all supplied in the Computer Music Lab for working at school when the lab is open. You can also [check out a Mac laptop with Pro Tools installed from the Lab](#) and/or other materials below for your home use during this course. As such you are **not required** to purchase any materials for this class. **BUT...** Purchase of the following materials is *recommended* so that you can work on audio projects at home and in the future as a music professional.

LEVEL 1: Required

1. Dropbox (or Google Drive, iCloud, OneDrive or another online storage option) where you can create a folder to upload and share all your projects via download links that you will paste into the assignment submission.
 - **TIP:** Audio session folders are typically hundreds of megabytes to several gigabytes in size. You will not upload these files directly to Canvas, but to

cloud storage you can share via links.

- By submitting assignments this way, you will keep your portfolio in your own online space rather than on the Canvas course so you don't lose access to your portfolio after the semester.
- This also gives you practice sharing Pro Tools sessions online, which every professional engineer must do *a lot*.

LEVEL 2: Highly Recommended but Not Required

The following materials are all supplied in the Computer Music Lab for working at school when the lab is open. You can also [check out a Mac laptop with Pro Tools installed from the Lab](#) and/or other materials below for your home use during this course. As such you are **not required** to purchase any materials for this class. **BUT...** Purchase of the following materials is *recommended* so that you can work on audio projects at home and in the future as a music professional.

2. **Reference headphones** are needed for all audio work. Earbuds and any other headphones you already own are almost assuredly not reference headphones. There are many companies and options, but be sure to choose headphones that *explicitly specify* they have a **flat frequency response for studio reference monitoring**. A popular, affordable option are [Sony MDR 7506](#) reference headphones. For a little more, I highly recommend the [AKG K371 BT](#).
3. **Mac or Windows laptop** with "**Pro Tools**" installed (*not* "Pro Tools First" or "Pro Tools Ultimate").
 - [Monthly education-priced subscription](#) highly recommended. \$9.99/month with no commitment. \$8.25/month with 1-year commitment.
 - Our 15-module course is less than 4 months. The cheapest option for the semester is using iLok cloud (free, see below) and purchasing 4-months of the license at the \$9.99/month-no-commitment price = \$39.95.

FAQs

- Q: "Can I use the free version 'Pro Tools First'?"
 - A: No. You need to use the paid, licensed "Pro Tools" version of the software.
 - Q: "Is my laptop compatible with Pro Tools?"
 - A: Check system requirements [here](#).
 - Q: "What if my computer doesn't meet the requirements?!"
 - A: Consult with the instructor. Many computers will work perfectly well for this class that do not meet the published system requirements, which are intended to support large-scale professional audio work that is extremely processing- and memory-intensive.
4. Your Pro Tools **license** will be stored in **iLok cloud** (free) or on an optional **physical iLok** ([purchased separately](#)).
 - **TIP:** iLok cloud requires you to have a completely uninterrupted internet connection during all Pro Tools work. If you anticipate doing any Pro Tools work without the internet (e.g. on the airplane, in the jungle, during a web outage...) you will need to have your license transferred to a physical iLok ([purchased separately](#)).

★ Technical Help (important)★

It is very difficult to diagnose software issues and answer technical questions through email. When you run into a problem:

1. Try first to solve it yourself through online searches
2. [The UNT Music Computer Lab website](#) offers live Chat help for software and hardware issues.
3. Pro Tools Technical support (see below) is the ultimate authority.
4. During office hours you can get in-person instructor help.

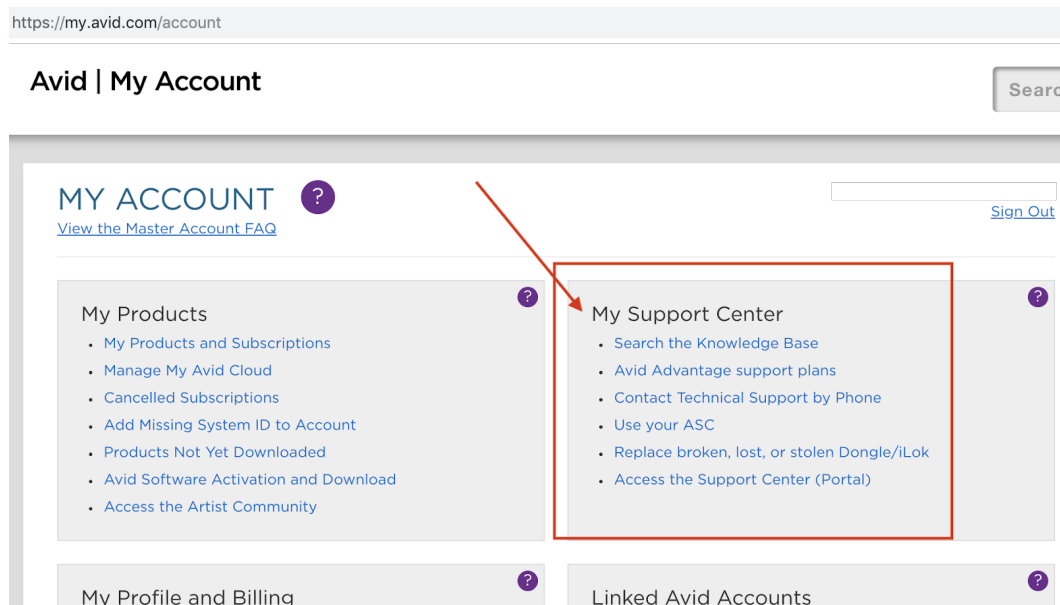
LEVEL 3: Recommended but Not Required

You will need to use the following two items to complete many assignments for this class, but both can be accessed in the Computer Music Lab Media Collaboration Suite. Visit <https://lab.music.unt.edu/media> for information and to schedule a time.

5. **Audio recording interface.** This is needed to plug an instrument or microphone into your computer for recording audio into a Pro Tools session. There are **MANY** available options, ranging from inexpensive to very expensive. A few high quality options I can personally recommend:
 - (least expensive but still high quality) [PreSonus AudioBox USB 96](#) or [PreSonus AudioBox 96 Studio USB 2.0 Hardware/Software Recording Kit](#) (includes reference headphones and a microphone as well)
 - (a little more expensive) [Focusrite Scarlett 2i2](#)
6. **Microphone, cable, stand and pop filter.** There are many, MANY microphone options for all budgets. A great mic to start with for studio recording is a [Large-diaphragm condenser microphone](#). I recommend you first set your budget then compare reviews of mics in that budget.
 - If you have a mic, you need a [mic cable](#) (be sure to check the length)
 - You probably need a mic stand: [full-size](#) / [desktop](#)
 - And for recording vocals you'll want a [pop filter](#)

Pro Tools Technical Assistance

When you purchase Pro Tools you will create an [Avid Master Account](#). The landing page of your account has several support options including the ability to call Avid and speak live with a technician.



For the quickest solution to your specific issue and to build your independent troubleshooting skills, please use Avid support and/or web searches for Pro Tools technical assistance before asking the professor or research assistant.

- **TIP:** Pro Tools issues vary greatly depending on your exact computer setup, your other installed/running software, your session preferences, etc. Troubleshooting directly with trained Avid support staff is the most likely way to a quick resolution.

If you cannot find a solution through Avid or elsewhere online, please send an email to both the professor and research assistant with your best description of the problem and one of us will try to help with a response during work hours.

- **TIP:** Don't start working on a project at the last minute. With audio work you can usually assume every task will take longer than you think even *without* any technical difficulties.



LATE WORK POLICY:

- Assignments turned in **on time** will be **graded and will receive instructor feedback via Zoom office hours.**
- **Late** lab and project assignments submitted **without prior approved extension request receive 0 (zero) points** and will not receive instructor feedback.
- To make a **48-hour deadline extension request on Canvas** (*not email*): Enter the text "Extension requested. Reason: [your reason]" to the Canvas assignment submission by Wednesday 11:59pm. All extension requests made after the deadline will be denied. All requests made by the Wednesday 11:59pm deadline are automatically granted an extra 48-hours (until Friday 11:59pm) at the latest to submit your work.

Canvas Technical Assistance

UIT Help Desk: <http://www.unt.edu/helpdesk/index.htm>

The University of North Texas provides student technical support in the use of Canvas and supported resources. The student help desk may be reached at:

Email: helpdesk@unt.edu

Phone: 940.565-2324

In Person: Sage Hall, Room 130

Hours: Monday-Thursday 8am-midnight / Friday 8am-8pm / Saturday 9am-5p /

Sunday 8am-midnight

Canvas technical requirements:

<https://clear.unt.edu/supported-technologies/canvas/requirements>

Assessments and Grading:

45%	Lab Exercises (10)
25%	Quizzes (5)
20%	Final Project (in 4 parts)
<u>10%</u>	<u>Attendance</u>
100%	Total

Lab exercises will always be due to Canvas by 11:59 pm Mondays. **Late submissions are not accepted without advance request of extension** (see policy below).

Quizzes will be administered via Canvas throughout the semester, covering the syllabus, lecture content and lab techniques. These will generally consist of multiple choice and true/false questions.

The **Final Project** will be a polished representation of your best digital audio work for the semester and may optionally include video as well. The project will be introduced in week 9 and completed in 4 parts, each part having specific requirements detailed week by week beginning week 12.

★Final Project bonus opportunity★

For each lab exercise you submit *on time with no deadline extension*, you will earn bonus points on the Final Project:

- All 10 Labs on time: 16% bonus
- 9 Labs on time: 13% bonus
- 8 Labs on time: 11% bonus
- 7 Labs on time: 8% bonus
- 6 Labs on time: 6% bonus
- 5 Labs on time: 5% bonus
- 4 Labs on time: 4% bonus
- 3 Labs on time: 3% bonus
- 2 Labs on time: 2% bonus
- 1 Labs on time: 1% bonus

IF YOU ARE STRUGGLING IN THIS CLASS:

If you are struggling for any reason please send me an email. I want to hear what you're experiencing and we will work together to fix it. Depending on your struggle, there might be immediate help from UNT's Office of Disability Accommodation (info and link below) and/or a medical note from a counselor or therapist that will authorize me to accommodate your needs. If your struggle doesn't match either of these, we will work to find another solution.

My life is complicated, as is everyone else's I know, as is yours, I suspect. The goal of this class is to empower you with new knowledge and experience to do things you can't yet do. That means every week we will butt up against challenges you don't yet know how to clear. The schedule and policies in this syllabus are all designed with the purpose of giving you the tools you need to succeed and motivating you to use them to pass each new challenge. Every assignment is designed for your focused practice and palpable improvement. Every deadline is in place to support your pacing. Every grading policy is there to encourage and reward you for working up to your own high standards. I am generally strict about enforcing everything in this syllabus because that strictness **usually helps** my students achieve their goals and they thank me later for the tough love. I say "usually" because I know there are sometimes situations where we need to do things differently to clear the right path for a student to succeed.

We will proceed through new material and assignments with a healthy momentum designed to be manageable and helpful. If for any reason you fall off the train and feel unable to catch up, talk to me right away and we'll get you back on board.

Module Topics and Assignments:

★ Check Canvas for ALL course materials, assignment details and quizzes ★		
Module	Topics	Work Due
Course Home Base	Syllabus and course introduction How to purchase course materials Pro Tools system configuration	Quiz 1 (syllabus quiz)
1	Sound propagation and digital audio conversion science basics Lab 0 (practice lab) - Pro Tools Session Folder Sharing	Lab 0 (not graded)
2	Navigating the Pro Tools workspace Playback Engine, H/W buffer, system latency Creating sessions and tracks; Importing audio; Modes and tools; Basic editing and bouncing Lab 1 - Commercial Song Edit and Bounce	Lab 1
3	Transduction science and microphone basics Recording voice; Track I/O, phantom power Setting record levels/gain structure Shuffle-mode editing speech Fades and crossfades Lab 2 - Radio Commercial	Lab 2
4	Acoustics and psychoacoustics science basics Recording sound effects; Audiosuite plugins Bouncing within Pro Tools Lab 3 - Four Original Sounds Made with Layers and AudioSuite Plugins	Lab 3 & Quiz 2
5	Music sequencing with audio loops Editing with Tab to Transient function Duplicate, repeat and loop functions; TCE Trim and Loop Trim; Tempo Conforming Clips Lab 4 - Multitrack Loop Sequence	Lab 4
6	Working with movie files Slip-mode editing to picture	Lab 5

	Lab 5 - Movie file sound replacement	
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7	How to mix music; The mix window in depth Channel strip components and routing; Track inserts Bus effects and sends Lab 6 - Mixing Music Basics	Lab 6 & Quiz 3
8	Loop Recording; Playlists Comping and consolidating performances from playlist view Lab 7 - Recording Vocals for ADR Session	Lab 7
9	Final project introduction MIDI and Software Instruments in Pro Tools Lab 8 - Song Sequence Using Software Instruments	Lab 8
10	Lab 9 - Recording Live Instruments pt 1 (drums)	
11	Lab 10 - Recording Live Instruments pt 2 (non-drums)	Quiz 4
12	Final Project Part 1: Pre-Mix, Levels, Pan	Final Project part 1
13	Final Project Part 2: Corrective Processing (EQ, de-essers, gates, compressors and limiters)	Final Project part 2
14	Final Project Part 3: Creative Processing (reverb, delay, modulation, distortion)	Final Project part 3
15	Final Project Part 4: Mastering	Final Project part 4 & Quiz 5 (cumulative)
Finals Week	Final Project part 4 & Quiz 5	

Topic schedule subject to change **with notice**

UNT POLICIES AND RESOURCES:

ACADEMIC INTEGRITY

Students caught cheating or plagiarizing will receive a "0" for that particular assignment or exam [or specify alternative sanction, such as course failure]. Additionally, the incident will be reported to the Dean of Students (Office of Academic Integrity), who may impose further penalty. According to the UNT catalog, the term "cheating" includes, but is not limited to: a. use of any unauthorized assistance in taking quizzes, tests, or examinations; b. dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; c. the acquisition, without permission, of tests or other academic material belonging to a faculty or staff member of the university; d. dual submission of a paper or project, or resubmission of a paper or project to a different class without express permission from the instructor(s); or e. any other act designed to give a student an unfair advantage. The term "plagiarism" includes, but is not limited to: a. the knowing or negligent use by paraphrase or direct quotation of the published or unpublished work of another person without full and clear acknowledgment; and b. the knowing or negligent unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials.

See: [Academic Integrity](#)

LINK: https://policy.unt.edu/sites/default/files/06.003.AcadIntegrity.Final_.pdf

STUDENT BEHAVIOR

Student behavior that interferes with an instructor's ability to conduct a class or other students' opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Dean of Students to consider whether the student's conduct violated the Code of Student Conduct. The university's expectations for student conduct apply to all instructional forums, including university and electronic classrooms, labs, discussion groups, field trips, etc.

See: [Student Code of Conduct](#)

Link: <https://deanofstudents.unt.edu/conduct>

ACCESS TO INFORMATION – EAGLE CONNECT

Your access point for business and academic services at UNT occurs at my.unt.edu. All official communication from the university will be delivered to your Eagle Connect account. For more information, please visit the website that explains Eagle Connect.

See: [Eagle Connect](#)

LINK: eagleconnect.unt.edu/

ODA STATEMENT

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Access (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with an accommodation letter. You can now request your Letters of Accommodation ONLINE and ODA will mail your Letters of Accommodation to your instructors. You may wish to begin a private discussion with your professors regarding your specific needs in a course. Note that students must obtain a new letter of accommodation for every semester. For additional information see the Office of Disability Access.

See: [ODA](#)

LINK: disability.unt.edu. (Phone: (940) 565-4323)

UNT Policy Statement on Diversity

UNT values diversity and individuality as part of advancing ideals of human worth, dignity and academic excellence. Diverse viewpoints enrich open discussion, foster the examination of values and exposure of biases, help educate people in rational conflict resolution and responsive leadership, and prepare us for the complexities of a pluralistic society. As such, UNT is committed to maintaining an open, welcoming atmosphere that attracts qualified students, staff, and faculty from all groups to support their success. UNT does not discriminate on the basis of race, color, national origin, religion, sex, sexual orientation, gender identity, gender expression, age, disability, genetic information, or veteran status in its application and admission process, educational programs and activities, employment policies and use of university facilities.

See: [Diversity Statement](#)

Link:

https://policy.unt.edu/sites/default/files/04.018_PolicyStateOnDiversity.pub8_18.pdf

2020-2021 Semester Academic Schedule (with Add/Drop Dates)

See: [Spring, 2021 Registration Guide](#)

Link: <https://registrar.unt.edu/registration/spring-registration-guide>

Academic Calendar at a Glance, 2020-2021

See: [Academic Calendar](#)

Link: <https://www.unt.edu/catalogs/2020-21/calendar>

Final Exam Schedule

See: [2021 Final Exam Schedule](#) <https://registrar.unt.edu/exams/final-exam-schedule/spring>

Financial Aid and Satisfactory Academic Progress

Undergraduates

A student must maintain Satisfactory Academic Progress (SAP) to continue to receive financial aid. Students must maintain a minimum 2.0 cumulative GPA in addition to successfully completing a required number of credit hours based on total hours registered. Students cannot exceed attempted credit hours above 150% of their required degree plan. If a student does not maintain the required standards, the student may lose their financial aid eligibility.

Students holding music scholarships must maintain a minimum 2.5 overall cumulative GPA and 3.0 cumulative GPA in music courses.

If at any point you consider dropping this or any other course, please be advised that the decision to do so may have the potential to affect your current and future financial aid eligibility. It is recommended that you to schedule a meeting with an academic advisor in your college or visit the Student Financial Aid and Scholarships office to discuss dropping a course before doing so.

See: [Financial Aid](#)

LINK: <http://financialaid.unt.edu/sap>

Graduates

A student must maintain Satisfactory Academic Progress (SAP) to continue to receive financial aid. Students must maintain a minimum 3.0 cumulative GPA in addition to successfully completing a required number of credit hours based on total registered hours per term. Music scholarships require a 3.5 cumulative GPA. Students cannot exceed maximum timeframes established based on the published length of the graduate program. If a student does not maintain the required standards, the student may lose their financial aid eligibility.

If at any point you consider dropping this or any other course, please be advised that the decision to do so may have the potential to affect your current and future financial aid eligibility. It is recommended you schedule a meeting with an academic advisor in your college, an advisor in UNT-International or visit the Student Financial Aid and Scholarships office to discuss dropping a course.

See: [Financial Aid](#)

LINK: <http://financialaid.unt.edu/sap>

RETENTION OF STUDENT RECORDS

Student records pertaining to this course are maintained in a secure location by the instructor of record. All records such as exams, answer sheets (with keys), and written papers submitted during the duration of the course are kept for at least one calendar year after course completion. Course work completed via the Canvas online system, including grading information and comments, is also stored in a safe electronic environment for one year. You have a right to view your individual record; however, information about your records will not be divulged to other individuals without the proper written consent. You are encouraged to review the Public Information Policy and the Family Educational Rights and Privacy Act (FERPA) laws and the university's policy in accordance with those mandates.

See: [FERPA](#)

Link: <http://ferpa.unt.edu/>

COUNSELING AND TESTING

UNT's Center for Counseling and Testing has an available counselor whose position includes 16 hours per week of dedicated service to students in the College of Music and the College of Visual Arts and Design. Please visit the Center's website for further information:

See: [Counseling and Testing](#)

Link: <http://studentaffairs.unt.edu/counseling-and-testing-services>.

For more information on mental health issues, please visit:

See: [Mental Health Issues](#)

Link: <https://speakout.unt.edu>.

The counselor for music students is:

Myriam Reynolds

Chestnut Hall, Suite 311

(940) 565-2741

Myriam.reynolds@unt.edu

ADD/DROP POLICY

Please be reminded that dropping classes or failing to complete and pass registered hours may make you ineligible for financial aid. In addition, if you drop below half-time enrollment you may be required to begin paying back your student loans. After the 12th class day, students must first submit a completed "Request to Drop" form to the Registrar's

Office. The last day for a student to drop a class in Spring, 2021 is April 2. Information about add/drop may be found at:

See: [Add Drop](#)

Link: <https://registrar.unt.edu/registration/spring-registration-guide>

STUDENT RESOURCES

The University of North Texas has many resources available to students. For a complete list, go to:

See: [Student Resources](#)

Link: https://www.unt.edu/sites/default/files/resource_sheet.pdf