MUS 319D – AET 305 , Foundations of Digital Sound and Music
22380 - 20710
8:00 – 9:30am, M–W, DFA 4.126

Instructor: Monte Taylor – montehtaylor@gmail.com
Office Hours: By Appointment Only

Description
Students enrolled this class will focus on learning the basic concepts behind digital audio and recording. The course will cover foundational material for dealing with recording, editing, sequencing, and mixing inside a Digital Audio Workstation. The primary objective of this course is to provide a functional understanding of digital audio systems and recording techniques that can be utilized in various fields including, but not limited to: audio production, film scoring, game music, and sound design.

By the end of this course, students will:

- Have an understanding of principles of sound (both acoustic and digital)
- Work with manipulation, entry and sequencing of MIDI data and instruments to create synthesized, and sampled sounds - This includes editing techniques and learning about various forms of processing such as reverberation, filtering, audio compression and other special effects.
- Gain experience editing, manipulating and processing audio recordings
- Create a stand-alone piece of music or sound design project demonstrating the knowledge gained throughout the semester

Class Format:
This course will be split between lectures and lab work. Some days will be dedicated to lecturing, answering questions, and demonstrating concepts. As the semester continues the lectures will begin to be split with hands-on lab work in the multimedia lab, using the tools demonstrated in class. Students will also be expected to complete projects and assignments according to the topics discussed.

Materials
Logic X Pro - Available in the classroom. Optional Purchase (Pro Apps Bundle for Education discount available from Apple).
Decent flat response closed or semi closed headphones (bring every class).

Optional
Rumsey, Francis and Tim McCormick. *Sound and Recording*. Waltham, MA: Focal Press, 2009
Izhaki, Roey. *Mixing Audio*. Waltham, MA: Focal Press, 2012
Komplete 11 – Native Instruments.
Eastwest - Composer Cloud

Prerequisites
For AET 305: Arts and Entertainment Technology 304 (AET304).
For MUS319D - None
Basic knowledge of music theory. (scales, chords, chord progression, rhythmic notation, etc.)

Future Study
For those wanting to continue courses in digital audio in the Fall after taking this course consider **MUS 329E** Introduction to Electronic Media, and **MUS 329J** Introduction to Computer Music.

Course outline
Subject to Change. Official communication with student will be either during class, or through UT Canvas. It is student's responsibility to check the class website regularly to be aware of changes made to this outline.

Date	Main Topic(s)	Readings	Assignments/ projects/quizzes
Week 1 1/22	– Course Introduction – review syllabus, course overview. – *Lecture:* Music theory review – *Lecture:* Acoustics, fundamentals of sound, and psychoacoustics.		
Week 2 1/27 1/29	– *Lab Work:* Working in a DAW 1 (Intro to Logic, signal flow, audio editing.) – *Lecture:* Introduction to digital audio	Logic Pro X User Guide	**Assignment 1**
Week 3 2/3 2/5	– *Lab Work:* Working in a DAW 2 (Bussing, routing, grouping, automation) – *Lecture:* MIDI (history, use synthesis and sampling)		**Assignment 2**
Week 4 2/10 2/12	– *Lab Work:* Working in a DAW 3 (Midi recording, editing. Project 1) – **Quiz # 1 (First 30 min of 2/10 class)**		**Quiz (on content from weeks 2, and 3) Project 1**
Week 5 2/17 2/19	*Lab Work:* Working on Project 1 – *Lecture:* Frequency processing (EQ, Filters, comb filters) – *Lab Work*		
Week 6 2/24 2/26	Audio processing – *Lecture:* Time processing (delay, flanger, chorus) – *Lab Work*		**Assignment 3**
Week 7 3/2 3/4	Audio processing – *Lecture:* Specialization (panning, reverb) – *Lecture:* Dynamic processing (compressor, limiter, gate, ducker) – L*ecture:* Basic subtractive synthesis (Alchemy) – *Lab Work*		**Midterm Project**

Week 8 3/9 3/11	– *Lab Work*		**Midterm Project**
Week 9 3/16 3/18	– **Spring Break**		**Midterm Project**
Week 10 3/23 3/25	– *Lecture:* Samplers and step sequencers (Kontakt, Eastwest, Ultrabeat) – *Lab Work*		**Final Project**
Week 11 3/30 4/1	– Lecture: Mixing/Mastering – Microphones and Studio equipment		**Final Project**
Week 12 4/6 4/8	– *Lab Work:* Final Project		**Final Project**
Week 13 4/13 4/15	– *Lab Work:* Final Project		**Final Project**
Week 14 4/20 4/22	– **Quiz # 2 (First 30 min of 4/20 class)** – *Lab Work: Final Project*		**Final Project**
Week 15 4/27 4/29	– **Final Project Presentations**		**Final Project**

Classroom policies
Students are expected to attend class daily. Students will have 2 excused absences (without doctor's note/notification). Each absence beyond 2 (without a doctor's note/notification) will result in a reduction of 5 points off the final (assignments) point total in the course.
All students are expected to participate in class discussion, and are expected to respect the opinions and statements of their classmates during discussion and classroom activities.

Contacting Teacher or TA(s)
For basic questions concerning assignments or lectures, email the the TAs and CC me. In order to maximize my availability to students regardless of respective schedules, I do office hours by appointment only.

Grading
Projects and homework will be submitted online via Canvas.
Make-up work will be accepted under special circumstances only. There will be no make-up exams, except in emergency circumstances (please see me for additional details).
Assignments should be turned in on time. Late assignments will be accepted up to 1 week after the due date, with a 5% deduction for each day late.

The final grade is calculated from:
45% – Assignments/quizzes/projects
15% – Midterm
30% – Final project
10% – Attendance

Grading Policy
To ensure fairness, all numbers are absolute, and will not be rounded up or down at any stage. Thus a B- will be inclusive of all scores of 80.000 through 83.999... The University does not recognize the grade of A+. Thus, the conversion from percentage value to letter grade is as follows:

A = 94 – 100
A- = 90 – 93.999…
B+ = 87 – 89.999…
B = 84 – 86.999…
B- = 80 – 83.999…
C+ = 77 – 79.999…
C = 74 – 76.999…
C- = 70 – 73.999…
D+ = 67 – 69.999…
D = 64 – 66.999…
D- = 60 – 63.999…
F = 0 – 59.999…

Student Rights & Responsibilities
- You have a right to a learning environment that supports mental and physical wellness.
- You have a right to respect.
- You have a right to be assessed and graded fairly.
- You have a right to freedom of opinion and expression.
- You have a right to privacy and confidentiality.
- You have a right to meaningful and equal participation, to self-organize groups to improve your learning environment.
- You have a right to learn in an environment that is welcoming to all people. No student shall be isolated, excluded or diminished in any way.

With these rights come responsibilities:
- You are responsible for taking care of yourself, managing your time, and communicating with the teaching team and with others if things start to feel out of control or overwhelming.
- You are responsible for acting in a way that is worthy of respect and always respectful of others.
- Your experience with this course is directly related to the quality of the energy that you bring to it, and your energy shapes the quality of your peers' experiences.
- You are responsible for creating an inclusive environment and for speaking up when someone is excluded.
- You are responsible for holding yourself accountable to these standards, holding each other to these standards, and holding the teaching team accountable as well.

Personal Pronoun Preference

Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records.

University Policies

UT electronic Mail Notification Policy

Electronic mail (e-mail) is a mechanism for official University and instructor communication to students. Students are expected to check e-mail on a frequent and regular basis in order to stay current with University- and course-related communications, recognizing that certain communications may be time-critical. It is recommended that e-mail be checked daily, but at a minimum, twice per week.

It is the responsibility of every student to keep the University and instructor informed of changes in his or her official e-mail address (do so at https://utdirect.utexas.edu/utdirect/bio/address_change.WBX). Consequently, e-mail returned to the University with "User Unknown" is not an acceptable excuse for missed communication. Similarly, undeliverable messages returned because of a full inbox or use of a spam filter will be considered delivered without further action required of the University or instructor.

(see http://www.utexas.edu/cio/policies/university-electronic-mail-student-notification-policy)

Academic Integrity

Each student in the course is expected to abide by the University of Texas Honor Code: "As a student of The University of Texas at Austin, I shall abide by the core values of the University and uphold academic integrity." **Plagiarism is taken very seriously at UT.** Therefore, if you use words or ideas that are not your own (or that you have used in previous class), you must cite your sources. Otherwise you will be guilty of plagiarism and subject to academic disciplinary action, including failure of the course. You are responsible for understanding UT's Academic Honesty and the University Honor Code which can be found at the following web address: http://deanofstudents.utexas.edu/sjs/acint_student.php

Drop Policy

If you want to drop a class after the 12th class day, you'll need to execute a Q drop before the Q-drop deadline, which typically occurs near the middle of the semester. Under Texas law, you are only allowed six Q drops while you are in college at any public Texas institution. For more information, see: http://www.utexas.edu/ugs/csacc/academic/adddrop/qdrop

University Resources for Students

Your success in this class is important to me. We will all need accommodations because we all learn differently. If there are aspects of this course that prevent you from learning or exclude you, please let me know as soon as possible. Together we'll develop strategies to

meet both your needs and the requirements of the course. There are also a range of resources on campus:

Services for Students with Disabilities
This class respects and welcomes students of all backgrounds, identities, and abilities. If there are circumstances that make our learning environment and activities difficult, if you have medical information that you need to share with me, or if you need specific arrangements in case the building needs to be evacuated, please let me know. I am committed to creating an effective learning environment for all students, but I can only do so if you discuss your needs with me as early as possible. I promise to maintain the confidentiality of these discussions. If appropriate, also contact
Services for Students with Disabilities, 512-471-6259 (voice) or 1-866-329- 3986 (video phone). http://ddce.utexas.edu/disability/about/

Counseling and Mental Health Center
Do your best to maintain a healthy lifestyle this semester by eating well, exercising, avoiding drugs and alcohol, getting enough sleep and taking some time to relax. This will help you achieve your goals and cope with stress.

All of us benefit from support during times of struggle. You are not alone. There are many helpful resources available on campus and an important part of the college experience is learning how to ask for help. Asking for support sooner rather than later is often helpful.

If you or anyone you know experiences any academic stress, difficult life events, or feelings like anxiety or depression, we strongly encourage you to seek support. http://www.cmhc.utexas.edu/individualcounseling.html

The Sanger Learning Center
Did you know that more than one-third of UT undergraduate students use the Sanger Learning Center each year to improve their academic performance? All students are welcome to take advantage of Sanger Center's classes and workshops, private learning specialist appointments, peer academic coaching, and tutoring for more than 70 courses in 15 different subject areas. For more information, please visit http://www.utexas.edu/ugs/slc or call 512-471-3614 (JES A332).

Undergraduate Writing Center: http://uwc.utexas.edu/
Libraries: http://www.lib.utexas.edu/
ITS: http://www.utexas.edu/its/
Student Emergency Services: http://deanofstudents.utexas.edu/emergency/

Important Safety Information:
If you have concerns about the safety or behavior of fellow students, TAs or Professors, call BCAL (the Behavior Concerns Advice Line): 512-232-5050. Your call can be anonymous. If something doesn't feel right – it probably isn't. Trust your instincts and share your concerns.

The following recommendations regarding emergency evacuation from the Office of

Campus Safety and Security, 512-471-5767, http://www.utexas.edu/safety/

Occupants of buildings on The University of Texas at Austin campus are required to evacuate buildings when a fire alarm is activated. Alarm activation or announcement requires exiting and assembling outside.

- Familiarize yourself with all exit doors of each classroom and building you may occupy. Remember that the nearest exit door may not be the one you used when entering the building.
- Students requiring assistance in evacuation shall inform their instructor in writing during the first week of class.
- In the event of an evacuation, follow the instruction of faculty or class instructors. Do not re-enter a building unless given instructions by the following: Austin Fire Department, The University of Texas at Austin Police Department, or Fire Prevention Services office.
- Link to information regarding emergency evacuation routes and emergency procedures can be found at:
  www.utexas.edu/emergency