## University of Florida | School of Music | Spring 2025

## **MUS 1360 Digital Musicianship and Production**

M,W,F | (9:35 AM - 10:25 AM) MUB 147

### Instructor

Xiaowei.cao@ufl.edu (786)-582-0060

Office hours: By appointment

## **Course Description**

MUS1360 introduces the fundamentals of music technology in the context of modern commercial music production. The course focuses on basic technical skills required for arranging, composing, and mixing popular music using Logic Pro X. Scientific foundations of acoustics, hearing, and digital audio will also be briefly addressed; Students will work on practical applications of these concepts and techniques.

### **Textbook**

Hosken, Dan. *An Introduction to Music Technology*. 2nd ed. New York, NY: Routledge, 2015. Logic Pro User Guide for Mac: https://support.apple.com/guide/logicpro/welcome/mac

## **Required Materials**

- Headphones/earphones (NO BLUETOOTH)
- 1/4 inch TRS Male to 3.5mm TRS Female Adapter
- USB flash drive or external hard drive (Google Drive)
- Musescore Studio (Lab)
- Audio Interface (Lab)
- Logic Pro X (Lab)
- Computer (at least 8GB of RAM, 16GB is recommended) (Lab)

# General Learning Goals.

This course enables students to:

- Develop a critical understanding of the fundamentals of essential tools used in today's musical production, such as digital audio workstation, MIDI controller, audio interface, and so on.
- Develop technical and creative skills for utilizing Logic Pro X in music production
- Learn to identify and solve common problems found in digital audio production.

Notice that although this class is not a composition class, it does require creative thinking and creative listening.

## **Assessment Information**

Students will be evaluated by four main factors: Participations, assignments & quizzes, two projects, and final exam.

Students will have to actively participate in class (participating in discussions, asking questions) to get full marks for participation.

Assignments and quizzes will mostly consist of materials that are covered in lectures and assigned readings. Quizzes will take place once every two weeks, while assignments will usually be finished by students during every Friday's lab hour (**Recommended**). All assignments/quizzes and their corresponding requirements will be posted on Canvas, which students should finish in a timely manner.

Students will also have to complete **two projects**. The first project will be a mock-up project, and **students will be guided to finish the first project** before spring break. The second project will either be a mock-up project or an arranging project (depending on students' choice), **which students will finish on their own.** 

Final exam will consist of questions that are covered in lectures and assigned readings.

## Grading

Assignments & Quizzes	15%
Project 1	20%
Project 2	30%
Discussions & Participations	10%
Attendance	10%
Final Exam	15%

\*2 unexcused absences are allowed, any unexcused absence after that will result in a 10% deduction from the total attendance grade (2% of final grade). 8 or more unexcused absences will automatically result in an E grade (failure).

For an absence to be excused, the student will need to email the instructor **BEFORE** class starts and provide valid documentation (for example: doctor's note, appointment confirmation, etc.) for missing class (religious holidays, school sponsored trips, or absences cleared/approved in advance by the instructor will also be count as excused)

Students are responsible for learning the content of a missed class (and if you have any questions, please don't suffer alone. Schedule an office hour and we will work things out!)

Late assignments will be penalized by one letter grade, and assignments turned in more than 48 hours after the deadline will receive no credit unless prior arrangements have been made.

## **Grading Scale**

Grade	Percentage	Grade point
А	93.4-100	4.00
A-	90.0-93.3	3.67
B+	86.7-89.9	3.33
В	83.4-86.6	3.00
B-	80.0-83.3	2.67
C+	76.7-79.9	2.33
С	73.4-76.6	2.00
C-	70.0-73.3	1.67
D+	66.7-69.9	1.33
D	63.4-66.6	1.00
D-	60.0-63.3	0.67
E	0-59.9	0.00

# **University Honest Policy**

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have

neither given nor received unauthorized aid in doing this assignment." The Conduct Code (<a href="https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/">https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/</a>) specifies a number of behaviors that are in violation of this code and the possible sanctions. If you have any questions or concerns, please consult with the instructor in this class.

## Class Schedules

## \*Class schedules on this syllabus are subject to change

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Week 1 (01/13 - 01/19)	Monday (01/13) Syllabus Overview  Wednesday (01/15) NO CLASS Readings for 01/17: An Introduction to Music Technology pp. 7-9 What is Sound pp. 18-23 Sound Properties and Waveform pp. 81-83 Audio Recording Path pp. 106-111 Analog vs Digital; Sampling Rate and Bit depth  Friday (01/17) Sound waves; Analog vs Digital; Sampling rate and Bit depth Readings for 01/22: An Introduction to Music Technology pp. 53-54 Digital Audio Workstation
	pp. 97-99 Digital Audio Interface
	pp. 136-141 Synthesizers and MIDI
Week 2 (01/20 - 01/26)	Monday (01/20) NO CLASS (MLK Day)  Wednesday (01/22) Lab Equipment Overview: DAW, Audio interface, and MIDI Controller 1 Readings for 01/27: Logic Pro User Guide for Mac (Logic Pro Basics; Work with projects; Work with tracks; Arrange a Project; Edit audio regions in the Audio Track Editor)  Friday (01/24) Lab Equipment Overview: DAW, Audio interface, and MIDI Controller 2  Quiz 1 due by Sunday 01/26 11:59pm
Week 3 (01/27 - 02/02)	Monday (01/27)
	Logic Pro X Overview: Basics and essential settings

	Wednesday (01/29) Working with Tracks: Edit audio regions in the Audio Track Editor Readings for 02/03: Logic Pro User Guide for Mac (Logic Pro Basics; Arrange a Project; Edit MIDI regions in the Piano
	Roll Editor)  Friday (01/31) Lab/Q&A
	Assignment 1 due by Wednesday 02/05 11:59pm
Week 4 02/03 - 02/09	Monday (02/03) Working with Tracks: Edit MIDI regions in the Piano Roll Editor 1 Wednesday (02/05)
	Working with Tracks: Edit MIDI regions in the Piano Roll Editor 2 Project 1 Overview Readings for 02/10: Logic Pro User Guide for Mac
	(Work with tracks; Mix a project; Logic Pro Effects)
	Friday (02/07) Lab/Q&A
	Quiz 2 due by Sunday 02/09 11:59pm
Week 5 02/10 - 02/16	Monday (02/10) What is Mixing?; Channel strips and Auxiliary tracks
	Wednesday (02/12) Mixing a Project: Reverb and Delay Readings for 02/17:
	An Introduction to Music Technology
	pp. 36-38 Overtone series Logic Pro User Guide for Mac
	(Logic Pro Effects)
	Friday (02/14) Lab/Q&A
	Assignment 2 due by Wednesday 02/19 11:59pm
Week 6 02/17 - 02/23	Monday (02/17) Mixing a Project: Overtone series, EQ, and Distortion 1
	Wednesday (02/19) Mixing a Project: Overtone series, EQ, and Distortion 2 Readings for 02/24:

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	Logic Pro User Guide for Mac (Automate mix and effects settings; Logic Pro Effects)
	Friday (02/21) Lab/Q&A
	Quiz 3 due by Sunday 02/23 11:59pm
Week 7 02/24 - 03/02	Monday (02/24) Mixing a Project: Basic automation and Compression 1
	Wednesday (02/26) Mixing a Project: Basic automation and Compression 2
	Friday (02/28) Lab/Q&A
	Assignment 3 due by Wednesday 03/05 11:59pm
Week 8 03/03 - 03/09	Monday (03/03) Advanced Automation: EQ sweep and Side-chain compression1
	Wednesday (03/05) Advanced Automation: EQ sweep and Side-chain compression 2
	Friday (03/07) Lab/Q&A
	Quiz 4 due by Sunday 03/09 11:59pm
Week 9 03/10 - 03/16	Monday (03/10) Lab/Q&A (Project 1)
	Wednesday (03/12) Lab/Q&A (Project 1)
	Friday (03/14) Lab/Q&A (Project 1)
	Project 1 due by Sunday 03/16 11:59pm
Week 10 03/17 - 03/23	NO CLASS (Spring Break)
Week 11 03/24 - 03/30	Monday (03/24) Arranging a Project: Instrument Articulation and Virtual Orchestration Project 2 Overview
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	Wednesday (03/26) Recording Basics; Microphones
	Friday (03/28)
	Lab/Q&A
Week 12 03/31 - 04/06	Monday (03/31) Basic Synthesis 1
	Wednesday (04/02) Basic Synthesis 2
	Friday (04/04) Lab/Q&A
	Quiz 5 due by Sunday 04/06 11:59pm Assignment 4 due by Wednesday 04/09 11:59pm
Week 13 04/07 - 04/13	Monday (04/07) Lead-sheet and Notation Software 1
	Wednesday (04/09) Lead-sheet and Notation Software 2
	Friday (04/11) Lab/Q&A
	Assignment 5 due by Sunday 04/13 11:59pm
Week 14 04/14 - 04/20	Monday (04/14) Lab/Q&A (Project 2)
	Wednesday (04/16) Lab/Q&A (Project 2)
	Friday (04/18) Lab/Q&A (Project 2)
Week 15 04/21 - 04/27	Monday (04/21) Final Exam Review
	Wednesday (04/23) NO CLASS Final Exam Open (Online)
	Friday (04/25) NO CLASS

## Students Requiring Accommodations

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. Click here to get started with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

### Course Evaluation

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <a href="https://gatorevals.aa.ufl.edu/students/">https://gatorevals.aa.ufl.edu/students/</a>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <a href="https://ufl.bluera.com/ufl/">https://ufl.bluera.com/ufl/</a>. Summaries of course evaluation results are available to students at <a href="https://gatorevals.aa.ufl.edu/public-results/">https://gatorevals.aa.ufl.edu/public-results/</a>.

## **Technology**

The use of cell phones during class is not permitted. It is not only the instructor's right, but their responsibility to remove obstacles to learning. Cell-phone use interrupts the student's concentration, is distracting to other students, and is distracting and disrespectful to the instructor. Students accessing the textbook electronically on a tablet or laptop are asked to turn off notifications on their device, or, if possible, turn off wi-fi completely or close their web browser.

## Campus Resources:

#### **Health and Wellness**

U Matter, We Care:

If you or a friend is in distress, please contact umatter@ufl.edu or (352) 392-1575 so that a team member can reach out to the student.

Counseling and Wellness Center: http://www.counseling.ufl.edu/cwc/Default.aspx, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Assault Recovery Services (SARS)

Student Health Care Center, 392-1161.

University Police Department, 392-1111 (or 9-1-1 for emergencies). http://www.police.ufl.edu/

#### **Academic Resources**

*E-learning technical support*, (352) 392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. https://lss.at.ufl.edu/help.shtml.

Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling. http://www.crc.ufl.edu/

*Library Support*, http://cms.uflib.ufl.edu/ask. Various ways to receive assistance with respect to using the libraries or finding resources.