

# Program Syllabus CLEVELAND SCHOOL OF AUDIO RECORDING

### **General Information**

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## **Program Description**

Welcome to Lava Room Recording's *Cleveland School of Audio Recording*. Throughout this 24-week program, you will learn the ins and outs of audio engineering & production stemming from basic signal flow to full session recording. By the end of this program, you should be comfortable and capable enough to run a session on your own, and pursue your career as an audio engineer. The program will be broken up into three 8-week periods allowing us to focus on each intricate part of recording without getting overwhelmed.

Here are a few of the topics we'll cover:

- Basics of Sound and Hearing
- Signal Flow
- Microphone Designs and Applications
- Analogue and Digital Recording Technology
- MIDI and Electronic Production/Programming
- Recording & Mixing Consoles
- Signal Processing



Not only will we read and learn about these topics, but also we will get hands-on experience in the studio and apply what we are learning. The opportunity to sit in on real recording/mixing sessions may also arise, and if so it is strongly recommended to take in all you can.

## **Program Materials**

Huber, D., & Runstein, R. (2005) Modern Recording Techniques (7th Ed.) Elsevier: Focal Press

# **Program Requirements**

The student is required to read the syllabus and complete the work as outlined. All assignments should be submitted on time. Late assignments will be penalized at the instructor's discretion.

Tests will be given every two weeks covering the material touched upon during that timeframe.

# **Grading**

Grades will be given out every 8 weeks to show your progress throughout the program, and will be accumulated at the end of the 24 weeks. The grading scale will be as follows:

A	95 – 100	4.0
В	85 – 94	3.0
C	75 – 84	2.0
D	70 – 74	1.0
F	0 - 69	0.0

All assignments and tests are graded on a 100-point scale, and then weighted to determine your final grade throughout each 8-week period. At the end of the 24 weeks, students will have a final project consisting recording and mixing of one song (25% of grade), and a final written exam (25% of grade). The cumulative grade for the three 8 week periods (50% of grade) will be combined with the final project



and final exam for your final grade. Students must finish the program with a C average to qualify for certification.

## *Grade Weights (1st 8 Weeks):*

8 Assignments/Quizzes 5% each 40%

4 Tests 15% each 60%

*Grade Weights (2<sup>nd</sup> 8 Weeks):* 

8 Assignments/Quizzes 5% each 40%

3 Tests (2) 15%/(1) 30% 60%

*Grade Weights (3<sup>rd</sup> 8 Weeks):* 

5 Assignments/Quizzes 10% each 50%

2 Tests 25% each 50%

 1st 8 weeks
 16.67%

 2nd 8 weeks
 16.67%

 3rd 8 weeks
 16.66%

 Final Project
 25%

 Final Exam
 25%



## **Program Outline**

## Week 1

- Reading
  - o Chapter 1 Introduction (pp. 1-32)
  - o Chapter 2 Sound and Hearing (pp. 33-66)
- Day 1
  - o Lecture on Chapters 1 & 2
  - o Finish reading Chapters 1 & 2 by next lesson
- Day 2
  - Lab on Sound & Hearing
  - o Assignment 1 given

#### Week 2

- Reading
  - o Chapter 3 Studio Acoustics & Design (pp. 67-114)
- Day 1
  - o Assignment 1 due
  - o Lecture on Chapter 3
  - o Finish reading Chapter 3 by next lesson
- Day 2
  - Lab/Tour on Studio Acoustics & Design
  - o Assignment 2 Given
  - Study for Test 1!!!!

## Week 3

- Reading
  - o Chapter 4 Microphones: Design & Applications (pp. 115-143)
- Day 1
  - Assignment 2 due
  - o Test on Chapters 1-3
  - o Lecture on Chapter 4
  - Receive signal flow chart for 'Record Mode' and study EVERY DAY for the rest of the program!
  - Day 2

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- SSL Signal Flow Lab
  - o Lab on Microphones (Type & Directional Response)
  - o Assignment 3 given



- Reading
  - o Chapter 4 Microphones: Design & Applications (pp. 143-186)
- Day 1
  - o Assignment 3 due
  - o Lecture on the rest of Chapter 4
  - o Finish reading Chapter 4 by next lesson
- Day 2
  - SSL Signal Flow lab
  - o Lab on Microphone Techniques
  - o Assignment 4 Given
  - o Study for Test 2!!!!

- Reading
  - Chapter 5 The Analogue Tape Recorder (pp. 187-214)
  - o Chapter 6 Digital Audio Technology (pp. 215-250)
- Day 1
  - Assignment 4 Due
  - o Test on Chapter 4
  - o Lecture on Chapters 5 & 6
  - o Have Chapter 6 read up to page 250 by next lesson
- Day 2
  - o Introduction to Pro Tools Lecture & Lab
  - Assignment 5 Given



- Reading
  - o Chapter 6 Digital Audio Technology (pp. 251-298)
- Day 1
  - o Assignment 5 Due
  - o Lecture on the rest of Chapter 6
  - o Have rest of Chapter 6 read by next lesson
- Day 2
  - o Intro to Reason Lab
  - o Assignment 6 Given
  - Study for Test 3!!!!

#### Week 7

- Reading
  - o Chapter 7 Digital Audio Workstations (pp. 235-257)
- Day 1
  - o Assignment 6 Due
  - o Test on Chapters 5 & 6
  - Lecture on Chapter 7
  - Read up to page 320
- Day 2
  - Signal Flow Lab (Vocal Routing)
  - DAWs Lab 1/Assignment 7

- Reading
  - Chapter 7 Digital Audio Workstations (pp. 257-290)
- Day 1
  - Assignment 7 Due
  - Lecture on the Rest of Chapter 7
  - o Have rest of Chapter 7 read by next lesson
  - Have supplemental material read for next week
- Day 2
  - o Lab 2 on MIDI
  - Assignment 8 Given
  - Study for Test 4!!!!



- Reading
  - o Chapter 9 MIDI & Electronic Music Technology (pp. 299-320)
- Day 1
  - Assignment 8 Due
  - o Test on Chapter 7
  - o Lecture 1 on Chapters 9
  - o Finish reading week's reading by next lesson
- Day 2
  - o Intro to Reason Lab
  - MIDI Lab 1/Assignment 9 Introduction to MIDI Environments

#### Week 10

- Reading
  - o Chapter 9 MIDI & Electronic Music Technology (pp. 321-346)
- Day 1
  - o Assignment 9 due
  - o Lecture 2 on Chapter 9
  - Finish reading Chapter 9
- Day 2
  - o MIDI Lab 2/Assignment 10 Composing Using MIDI
  - Study for Test 5!!!!

- Reading
  - o Chapter 8 Groove Tools & Techniques (pp. 291 308)
- Day 1
  - Test on Chapter 9
  - Lecture on Chapter 8
- Day 2
  - Lab on Groove Tools & Techniques/Assignment 11



- Reading
  - o Chapter 10 Multimedia & the Web (pp. 369-392)
- Day 1
  - Lecture on Chapter 10
  - o Finish reading Chapter 10 by next lesson
- Day 2
  - o Drum Miking Lab
  - o Assignment 12 Given

#### Week 13

- Reading
  - o Chapter 11 Synchronization (pp. 393-414)
- Day 1
  - o Assignment 12 Due
  - o Lecture on Chapter 11
  - o Finish reading chapter 11
  - o Sync Lab
- Day 2
  - Assignment 13 Given
  - o Mix Lab 1 (Basic Mixing/Dynamic Effects)

- Reading
  - o Chapter 12 Amplifiers (pp. 415-421)
- Day 1
  - Assignment 13 Due
  - o Lecture on Chapter 12
  - Guitar Miking Lab (electric)
- Day 2
  - Mix Lab (Time Based Effects)
  - o Signal Flow Practical/Assignment 14 (Vocal Routing)
  - Study for Test 7!!!!



- Reading
  - o Chapter 13 The Art & Tech. of Mixing (pp. 423-440)
- Day 1
  - o Test on Chapters 11 & 12
  - o Lecture on Chapter 13
  - o Read up to page 440
- Day 2
  - o Art/Tech. Mix Lab/Assignment 15

#### Week 16

- Reading
  - o Chapter 13 The Art & Tech. of Mixing (pp. 441-468)
- Day 1
  - o Lecture on the Rest of Chapter 13
  - o Have rest of Chapter 13 read by next lesson
- Day 2
  - Mixing Lab
  - Assignment 16 Given
  - Study for Test 8!!!!

- Reading
  - o Chapter 14 Signal Processing (pp. 469-486)
- Day 1
  - o Assignment 16 Due
  - o Lecture on Chapter 14
  - Mixing Lab
- Day 2
  - o Signal Processing Mixing Lab/Assignment 17



- Reading
  - o Chapter 14 Signal Processing (pp. 487-512)
- Day 1
  - o Lecture on the rest of Chapter 14
  - o Mixing Lab
- Day 2
  - Mixing Lab
  - Signal Flow Quiz!/Assignment 18
  - Study for Test 9!!!!

#### Week 19

- Reading
  - o Chapter 15 Noise Reduction (pp. 513-522)
- Day 1
  - o Test on Chapter 14
  - o Lecture on Chapter 15
  - Talk about final project
  - Start looking for something to record!
  - Mixing Lab/Studio A Practical Review
- Day 2
  - Mixing Lab
  - o Studio A Practical/Assignment 19

- Reading
  - Chapter 16 Monitoring (pp. 523-544)
- Day 1
  - Lecture on Chapter 16
  - Mixing Lab
  - Keep looking for an artist for final project!!!!
- Day 2
  - Mixing Lab
  - o Study for Test 10



- Reading
  - o Chapters 17 & 18 Surround Sound & Mastering (pp. 545-574)
- Day 1
  - o Test on Chapters 15 & 16
  - o Lecture on Surround and Mastering
  - Mixing Lab
- Day 2
  - Mix Lab Evaluation/Assignment 20
  - o Assignment 21/Final Review Given
  - Go over details for Final Project starting NEXT WEEK!!!!

#### Week 22

- Reading
  - o Chapter 19 Product Manufacture (pp. 575-596)
  - o Chapter 20 Studio Tips & Tricks
- Day 1
  - Assignment 21 Due
  - o Brief lecture on chapters 19 & 20
  - Tracking for Final Project Begins
- Day 2
  - Tracking for Final Project

#### Week 23

- Day 1
  - Continue tracking for Final Project (if needed)
  - o Begin mixing Final Project (if time allows)
- Day 2
  - Begin Mixdown process for Final Project
  - o Begin studying for Final Exam!!!!

- Day 1
  - Last day for mixing Final Project
  - Study for Final Exam
  - o Final Exam Review
- Day 2
  - o Final Project Due
  - o Final Exam!!!!