

Computer Recording for the Performing Musician

Course Syllabus • Fall 2014

MTEC 310 (43426D)
Class Date/Time: Tuesday/12:00-1:50 PM
Class Location: TMC G147
Charles Gutierrez, Instructional Professor

Office Location: TBD **Office Phone:** TBD **Email:** chgutier@usc.edu
Office Hours: On UPC Campus T-Th and/or by Appointment

Goal: It is the goal of this course that each music performance based student—upon successful completion—gains a working knowledge of technical sciences and artistic skills of sound and digital audio as well as non-linear (computer-based) digital recording, editing and mixing techniques as they relate to the performing musician in various popular music genres and styles. To reach this goal, each student must successfully accomplish the objectives described below. Accomplishment will be evaluated with assignments, quizzes and exams, and through in-class participation.

Objectives:

- Describe and explain acoustical and digital audio concepts
- Demonstrate working knowledge of microphones, mixers, monitors and recording devices
- Record single- and multi-track audio
- Edit digital audio using non-linear editing software
- Mix and process digital audio using digital hardware and software
- Analyze various current popular music styles and genres

Recommended Text: *Modern Recording Techniques, seventh edition* by David Miles Huber and Robert E. Runstein. You are to read the appropriate sections and complete the associated online quiz **BEFORE** the class session in which that subject will be presented. Other texts or research materials can be used and will be discussed in class orientation.

Required Materials: Stereo Headphones with 1/4" TRS plug. You may also want to use a 1GB+ USB "jump" drive for backup purposes. The G147 lab computers have only USB or Thunderbolt connectivity.

Online Access and Materials: In-class handouts, audio examples and other supplemental materials and readings may be accessed in Blackboard (<https://blackboard.usc.edu/>). The course will also access the free availability of Lynda.com courses through your USC Blackboard portal. I will only use your USC email to contact you and send any notifications, so please check that account regularly.

Course Grading:

Editing and Lab Assignments	10%	
Mid Term Project	10%	
Final Mix Project	20%	
Reading Quizzes*	30%	Online
Final Exam	30%	Online

Attendance: Because so much of this course will be practical in nature, attendance is extremely important. Each student will be allowed two (2) unexcused absences without any direct effect on her/his grade. After the two unexcused absences, however, the student's grade will be lowered 5% for each additional unexcused absence. **The only excused absences are for university sanctioned events and must be approved by me IN ADVANCE of the date to be missed.**

Due Dates: Online Reading and Quizzes* must be completed before the class for which the reading assignment has been made in the course outline. Quizzes not completed by 12:00pm on the date due will be graded as a zero. Recorded Assignments are due by the beginning of class (12:00) on the date indicated in the course outline. Assignments turned in after class has begun will be considered late and will be penalized 10% for that day as well as 10% for each additional day or portion of a day that they are late.

NOTE: Please help protect the facility and equipment. Do not bring any food or drink into CSS G147. Do not allow guests and unauthorized persons into the facility. Do not prop open any doors to the room. Failure to comply with any of these directives may result in loss of access to CSS G147, and thus, academic consequences related to failure to complete the remainder of the course.

Academic Dishonesty will not be tolerated in any part of this course (assignments, quizzes, exams, etc.) If you are not sure what violates the University code, please read the pertinent sections of *SCampus* or see me. Ignorance of the rules will not be an excuse.

Disabilities Policy: Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me as early in the semester as possible. DSP (213-740-0776) is located in STU 301 and is open 8:30 am-5:00 pm, Monday through Friday.

Course Outline Fall 2013

Date	Class Topic**	Reading*	Assignments/Exams
Week 1	Policies, Procedures, Facilities, Introduction to DAW		
Week 2	Sound and Acoustics	pp. 44-71	
Week 3	Digital Audio	pp. 199-233	Sound Theory Quiz
Week 4	Microphones, Microphone Techniques	pp. 111-141	
Week 5	Stereo Microphone Techniques	pp. 142-146	Digital Audio Quiz
Week 6	Microphone Placement Techniques	pp. 146-179	
Week 7	Computers as Recording Devices	pp. 235-289	Microphones Quiz
Week 8	Mixing Console	pp. 423-467	
Week 9	Interfaces, Preamps, Monitors	pp. 415-422, 523-544	Consoles Quiz
Week 10	Instructor's Choice		Hands-On Mid Term Project
Week 11	Recording Techniques	pp. 597-612	
Week 12	Non-Linear Digital Editing		
Week 13	Mixing and Signal Processing	pp. 469-522	
Week 14	Individual Work on Mix Projects		Signal Processing Quiz
Week 15	Mastering, Course Review	pp. 563-573	
Week 16	5:00PM Lab Closes for the Semester		Mix Project due
Finals Week	USC Published Schedule		Final Exam

TOPIC SCHEDULE SUBJECT TO CHANGE

Notes:

*All reading assignments are from ***Modern Recording Techniques*** (7th Edition) by David Miles Huber and Robert E. Runstein. The reading must be completed before coming to class that day. **The online quiz must be completed before 12:00pm on the day the reading is due. Failure to complete the quiz by that time will result in a zero grade for that particular quiz.** Please feel free to read other sections of the book besides those selected in the course outline.

**Each class will contain both theoretical and practical experiences. In general, I will present the day's subject material during the first part of the class then work on it for the remainder of the class. Should the needs of the class so dictate, I reserve the right to change this course outline. You will be notified of any substantive schedule changes.