REC 105: FUNDAMENTALS OF AUDIO TECHNOLOGY

Citrus College Course Outline of Record

Heading	Value
Effective Term:	Fall 2021
Credits:	4
Total Contact Hours:	126
Lecture Hours :	54
Lab Hours:	72
Hours Arranged:	0
Outside of Class Hours:	108
Prerequisite:	REC 100, REC 103, and REC 140.
Corequisite:	REC 115, REC 125, REC 135, and REC 145.
Transferable to CSU:	Yes
Transferable to UC:	No
Grading Method:	Standard Letter

Catalog Course Description

This course is an introduction to audio technologies and recording techniques. Units include computer basics for audio production, the production console, microphones, digital recording systems, signal processing, studio techniques. 54 lecture hours, 72 lab hours.

Course Objectives

- describe the function and basic operation of studio equipment
- demonstrate the application of processed effects to sweeten final product
- demonstrate recording setup procedures
- demonstrate an understanding of audio recording technology
- demonstrate an ability to setup the equipment for a small recording project
- demonstrate intermediate signal processing techniques
- demonstrate basic equalization and reverb techniques
- determine appropriate use of outboard effects
- demonstrate mixing techniques
- demonstrate a firm understanding of signal flow
- apply principles of physical and psycho-acoustics

Major Course Content

1. Computer Basics – hardware, software and file management for audio recording and editing
2. The Audio Workstation – signal path, patching and hardware functions
3. The Production Console – patch bay connections and operation
4. Microphones – microphone types and applications; stereo mic'ing
5. Digital Recording Systems – tracking and mixing using the digital audio workstation
6. Signal Processing – using frequency, dynamics and time-based effects
7. Monitors and Monitoring – monitor styles and types
8. Session set-up, conduct and troubleshooting

Lab Content

1. Computer and media workstation set-up
2. Studio & workstation signal path exercises
3. File importing and exporting
4. Media workstation exercises and assignments
5. Basic console signal routing and operation
6. Workstation and studio recording and mixing projects

Suggested Reading Other Than Required Textbook

Music and recording industry periodicals

Examples of Required Writing Assignments

A four-page paper on audio post-production for film and television is required.

Examples of Outside Assignments

Remote recording for audio post-production projects

Instruction Type(s)

Lecture, Lab, Online Education Lecture, Online Education Lab