AUDIO ENGINEERING (MUSC)

MUSC 1323 Audio Electronics Troubleshooting 3 Credits (2 Lec, 2 Lab)
This course covers basic concepts in electricity, Ohm's Law, circuit analysis and troubleshooting audio problems. Topics include soldering techniques, audio electronic alignment procedures for tape machines, console maintenance, and sound reinforcement equipment maintenance.
Course Type: Technical

MUSC 1327 Audio Engineering I 3 Credits (2 Lec, 4 Lab)
This course provides an overview of the modern recording studio and related personnel. Topics include basic studio electronics and acoustic principles, wave form and analysis, microphone concepts and miking techniques, studio setup and signal flow, recording console theory, signal processing concepts, tape machine principles and operation, and overview of mixing and editing.
Course Type: Technical

MUSC 1331 Musical Instrument Digital Interface 3 Credits (2 Lec, 2 Lab)
This course provides an overview of Musical Instrument Digital Interface (MIDI) systems and applications. Topics include the history and evolution of MIDI, hardware requirements, computer numbering systems, channels and modes, the MIDI language and typical implementation of MIDI applications in the studio environment using software-based sequencing programs.
Course Type: Technical

MUSC 1405 Live Sound I 4 Credits (2 Lec, 4 Lab)
This course is an overview of the field of live sound. Includes principles of live sound and the theory an interconnection of the components of a sound reinforcement system.
Course Type: Technical

MUSC 2101 Audio Engineering Practices 1 Credit (0 Lec, 3 Lab)
This course is a practical application of the concepts, techniques and procedures presented in Audio Engineering I and Audio Engineering II. The students will be divided into several working units comprised of 3-4 students per unit. Each group will be required to complete two recording projects during the semester. It may be repeated for credit up to three times if topics and learning outcomes vary.
Prerequisite(s): MUSC 2427

Course Type: Technical

MUSC 2355 Musical Instrument Digital Interface II 3 Credits (2 Lec, 2 Lab)
This is a continuation of MIDI I with emphasis on advanced sequencer operation and SMPTE-based synchronization in the interaction of multiple recording and playback systems. Topics also include synthesis and its relation to software and hardware devices, sampling and sampling manipulation utilizing software sequencers, and sequencing for video. The student will perform advanced MIDI techniques, execute multimachine synchronization and demonstrate advanced use of software-based sequencing, synthesis and sampling devices.
Prerequisite(s): MUSC 1331

Course Type: Technical

MUSC 2386 Internship-Recording Arts Technology/Technician 3 Credits (0 Lec, 18 Lab)
This is a practical, general training and experience in the workplace. The College, with the employer, develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning experiences vary.
Prerequisite(s): MUSC 2447, MUSC 2355

Course Type: Technical

MUSC 2403 Live Sound II 4 Credits (2 Lec, 4 Lab)
This course provides an overview of stage monitor systems. Includes monitor system set-up, operation, and stage management. Also covers interactivity between sound management, performance quality and audience experience.
Course Type: Technical

MUSC 2427 Audio Engineering II 4 Credits (3 Lec, 3 Lab)
This is a continuation of Audio Engineering I with emphasis on implementation of techniques and theories of the recording process. Topics include applications of microphones, the audio console, the multitrack tape recorder, and signal processing devices in the recording session environment.
Prerequisite(s): MUSC 1327

Course Type: Technical

MUSC 2447 Audio Engineering III 4 Credits (3 Lec, 3 Lab)
This course covers presentation of advanced procedures and techniques utilized in recording and manipulating audio information. Topics include advanced computer-based console automation, hard disk-based digital audio editing, nonlinear digital multitrack recording and advanced engineering projects.
Prerequisite(s): MUSC 2427

Course Type: Technical