

# MUST - Music-Technology

## **MUST 112 Basic Home Recording: 3 Credits (3 Lec)**

This class will familiarize students with information and processes in a functioning home studio using Pro Tools. Through hands-on tutorials, the students will develop essential techniques for setup, recording, editing, and basic mixing.

## **MUST 115 Introduction to Digital Music: 3 Credits (3 Lec)**

PREREQUISITES: MTEC Majors ONLY First course in the Music Technology Sequence. Concepts and terms, creative projects using software and hardware, historical background, an introduction to the music industry, and tools for building self-directed careers within the changing field of music technology

## **MUST 125 MIDI and Electro-Acoustic Comp: 3 Credits (3 Lec)**

PREREQUISITE: MTEC Majors ONLY, MUST 115 Continuation of the MIDI component of Introduction to Digital Music. Composition and music notation, synthesizer programming, constructing an integrated music technology studio, and advanced applications for film and theatre

## **MUST 217 Entertainment Business: 3 Credits (3 Lec)**

PREREQUISITE: W and US core. Explore the business of Music, Entertainment, and Film industries. Artist Copyright, Royalties, Mechanical Licensing, Performance Contract, and basic contracts will be discussed with regard to business history, organization, media channels, and customer base

## **MUST 220 Recording I: 3 Credits (3 Lec)**

PREREQUISITE: MTEC Majors ONLY, MUST 125, MUSI 105, MUSI 135, MUSI 140. Introduction to, and exploration of, technologies and concepts used to create, record, edit, format, manufacture, reinforce and reproduce audio. Combination of lecture and hands-on learning

## **MUST 225 Electronic Monster Laptop Ensemble: 2 Credits (2 Lab)**

PREREQUISITE: consent of instructor. Performance and study of music making in an ensemble of mainly laptop computers. Computer music programming skills as well as music performance experience desirable

## **MUST 294 Seminar/Workshop: 1 Credits (1 Other)**

PREREQUISITES: MTEC Majors ONLY, MUST 125. Introduction to faculty research through faculty mini seminars. Departmental research facilities. Research groups. Research planning decisions (MSU laboratory, summer internship, student exchange, REU, USP, etc)

## **MUST 305 Orchestration for New Media: 3 Credits (3 Lec)**

PREREQUISITE: MTEC Majors ONLY, MUST 125, MUSI 106, MUSI 136, MUSI 141, Applied Music (MUSI 195 or MUSI 260); other music majors: permission of instructor only. Study of the full orchestra, its subgroups, and integration of software instruments for orchestrating music in today's world

## **MUST 320 Recording II: 3 Credits (3 Lec)**

PREREQUISITE: MTEC Majors ONLY, MUST 220, EELE 217. An advanced laboratory course in recording and mixing, to include microphone techniques, outboard gear, recording and mixing individual instruments and ensembles, mastering techniques, session management, and business organization

## **MUST 341 Sound Design and Synthesis: 3 Credits (3 Lec)**

PREREQUISITE: MTEC Majors ONLY, MUST 220, MUSI 106, MUSI 136, MUSI 141, Applied Music (MUSI 195 or MUSI 260) Students will explore artistic and scientific applications of recent research in sound, including software for analysis-resynthesis, noise reduction, cross-synthesis, physical modeling, and acoustical analysis. Links between music composition, acoustics, computer science, and multimedia post production are emphasized

## **MUST 350 Real-Time Computer Music: 3 Credits (3 Lec)**

PREREQUISITE: MTEC Majors ONLY, MUST 341. Study of the real-time interactive computer music programming and application. Students will learn standard objects and operational strategies by building small modules and assembling them into larger patches, which then facilitate compositions and performances

## **MUST 380 Interdisciplinary Project I: Visual Music: 3 Credits (3 Lec)**

PREREQUISITE: MTEC Majors and FILM Majors Only, all other majors: Consent of Instructor; MUST 341 or FILM 212. For upper-level Film and Music Technology students. Exploring and creating works in cross-disciplinary audiovisual genres. Multimedia projects with visuals and sound. Overview of the history and creation of innovative audio, audiovisual, and installation art forms

## **MUST 382 Interdisciplinary Projects II: 3 Credits (3 Lec)**

PREREQUISITE: MTEC Majors ONLY, all other Majors: Consent of Instructor; FILM 259. Topics vary by semester in this interdisciplinary course connecting Music Technology with other areas of study. Possible projects include sound design and composition for large theatre productions, audio equipment design with Electrical Engineering students, studio design and acoustics, computing in the arts with CS students, and others

Repeatable up to 12 credits.

## **MUST 384 Film Scoring: 3 Credits (3 Lec)**

PREREQUISITE: MTEC Majors ONLY, MUST 305 The course objective is to provide the student with knowledge and guidance through the various stages of the process of creating original music to accompany a visual medium. While no previous film scoring experience is required, a fundamental background in music theory, keyboard skills, and music technology is preferred

## **MUST 482 Electronic Composition: 1-3 Credits (1-3 Other)**

PREREQUISITE: MTEC Majors ONLY, MUST 341. Individual study of compositional practices employing electronic media, electronic/computer music, compositional processes and techniques, and aesthetic concepts. Students meet minimum weekly progress standards and a total requirement for minutes of music written, adjustable for the complexity of the medium Repeatable up to 24 credits.

## **MUST 494 Seminar: 1 Credits (1 Other)**

PREREQUISITE: MTEC Majors ONLY, MUST 220. Topics offered at the upper division level which are not covered in regular courses. Students participate in preparing and presenting discussion material Repeatable up to 4 credits.

## **MUST 498 Internship: 1-6 Credits (1-6 Other)**

PREREQUISITE: MTEC Majors ONLY, MUST 220, Consent of instructor. An individualized assignment arranged with an agency, business, or other organization to provide guided experience in the field. Students may repeat this course up to a maximum of 12 credits Repeatable up to 12 credits.

## **MUST 499R Senior Capstone Project: 3 Credits (3 Lec)**

PREREQUISITE: MTEC Majors ONLY, MUST 384, Senior Standing. This course involves the creation and public performance of an original large-scale work (film score, multimedia work, EP-length album, theatrical soundtrack, etc) and research project/paper synthesizing knowledge and inquiry in Music Technology

## **MUST 544 Computer Applications in Music Education: 3 Credits (3 Lec)**

PREREQUISITE: Admission to the Master of Education with emphasis in Music program. Other graduate programs and non-degree-seeking graduate students by permission of instructor. An introduction to computer applications in music, including music notation, audio recording, and basic composition with audio and MIDI. This course is particularly geared toward music educators