



MUSI 124 - Electronic Music Course Outline

Approval Date: 01/12/2017

Effective Date: 06/10/2017

SECTION A

Unique ID Number CCC000579670

Discipline(s) Commercial Music
Music

Division Arts and Humanities

Subject Area Music

Subject Code MUSI

Course Number 124

Course Title Electronic Music

TOP Code/SAM Code 1004.00 - Music, General / D - Possible Occupational

Rationale for adding this course to the curriculum The course is modified to intensify its focus on composition of electronic music.

Units 2

Cross List N/A

Typical Course Weeks 18

Total Instructional Hours

Contact Hours

Lecture 18.00

Lab 54.00

Activity 0.00

Work Experience 0.00

Outside of Class Hours 36.00

Total Contact Hours 72

Total Student Hours 108

Open Entry/Open Exit No

Maximum Enrollment 24

Grading Option Letter Grade or P/NP

Distance Education Mode of Instruction

SECTION B

General Education Information:

SECTION C

Course Description

Repeatability May be repeated 0 times

Catalog Description The course is a study of techniques and elements of electronic music production. Topics include synthesis, sampling, and MIDI (Musical Instrument Digital Interface) sequencing. Compositions are expected of students utilizing electronic music techniques.

Schedule Description

SECTION D

Condition on Enrollment

1a. **Prerequisite(s):** *None*

1b. **Corequisite(s):** *None*

1c. **Recommended**

- MUSI 110

1d. **Limitation on Enrollment:** *None*

SECTION E

Course Outline Information

1. Student Learning Outcomes:

A. Integrate the notation, sound and sequencing applications in order to create and arrange music scores using notational and audio software.

2. **Course Objectives:** Upon completion of this course, the student will be able to:

- Recognize and define sound files: WAV (WAVEform), MP3 (*MPEG-1 Audio Layer 3), MIDI (Music Instrument Digital Interface), and AIFF (Audio Interchange File Format)
- Manipulate audio/MIDI files using various computer applications.
- Examine and apply sequencing techniques (layering of sound) in computer applications.
- Describe the principles of digital sampling.
- Create prescribed sounds utilizing various synthesis techniques.
- Create compositions and/or live performances using synthesis and/or MIDI.
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3. Course Content

- Computer Technology
 - Digital music vocabulary
 - Audio
 - Garage Band
 - Audacity
 - Basic Notation Software
 - Sibelius
 - Finale
 - Modes of entry
 - mouse
 - alphabet
 - step-time
 - flexi-time entry
 - keyboard/MIDI controller

- d. Arranging
 - a. moving
 - b. copying
 - c. pasting
 - d. adding layers
 - d. MIDI (Music Instrument Digital Interface)
 - e. Computer and Piano Keyboard Skills
 - f. Introduce WAV & MP3 & AIFF Files
- B. Musicianship
 - a. Notation
 - a. staff
 - b. notes
 - c. rests
 - d. rhythm
 - e. key
 - b. Arranging
 - a. timbre
 - b. instrumentation
 - c. texture
 - d. voicing
 - c. Composition
 - d. Expressive markings, i.e. dynamics
 - e. Technique markings, i.e. marcato, tempo, tenuto
 - f. Transposition
 - g. Voicing
 - h. Musical Vocabulary
- C. Sound Manipulation
 - a. Sequencing: layering tracks (4-8 tracks)
 - b. Editing
 - a. cut
 - b. copy
 - c. splice
 - c. Altering frequencies
 - d. Varying speed and pitch
 - e. Sampling
 - f. Sound effects
 - a. reverb
 - b. delay
 - c. chorus
 - d. flange
- D. Sound Capture
 - a. Import/exporting files
 - b. MIDI (Music Instrument Digital Interface)
 - c. Synthesizer
 - d. Microphone
 - e. Piano Keyboard
 - f. WAV (Waveform)
 - g. AIFF (Audio Interchange Format File)
 - h. MP3 (MPEG-1 Audio Layer 3)
 - i.

4. Methods of Instruction:

Critique: Written and group oral critiques analyzing student works related to specific course topics and assignments.

Discussion: Peer discussions on use of hardware and software for composition, reinforcing critical and creative skills.

Lab: Instructor guided laboratory time to apply concepts and skills to course content and assignments. Laboratory time includes both one-on-one and all-group project instruction.

Lecture: Audio, video and computer enhanced lectures over core concepts, terminology and historical development of compositional hardware and software. Instructor may demonstrate using sound modules, synthesizer and software.

Mediated Learning: Listening activities include listening and evaluation of representative work by established composers.

Projects: Assignments include presentation of original composition utilizing specific software.

5. Methods of Evaluation: Describe the general types of evaluations for this course and provide at least two, specific examples.

Typical classroom assessment techniques

Exams/Tests -- Written exams on course concepts and presentation of original composition using synthesis of computer and outside captured sound components.

Quizzes -- Quizzes throughout the semester on specific material related to software projects and reading assignments.

Projects -- Presentation of original compositional projects utilizing electronic music techniques.

Home Work -- Completion of homework assignments from MIDI text book, handouts and oral critiques for classroom presentations.

Lab Activities -- Work on group and individual projects.

Final Exam -- Written and final compositional project.

Mid Term -- Written exam based on classroom lectures, including software, MIDI, audio and sampling techniques.

Letter Grade or P/NP

6. Assignments: State the general types of assignments for this course under the following categories and provide at least two specific examples for each section.

A. Reading Assignments

1) Read chapter 11 (The Principles of Computer Music) from the book "Electronic and Experimental Music" and be prepared to discuss the topic of "Digital Sound Resources and Synthesis."

2) Read chapter one on "Synthesis and Synthesizer: Digging Beneath the Surface of Your Synthesizer" in the book "Refining Sound: A Practical Guide to Synthesis and Synthesizers" and be prepared to discuss the use of synthesizers in composition.

B. Writing Assignments

1) Capture three live sound recordings of 60 seconds each in duration, and integrate them into a three minute composition.

2) Transpose a notational file into three different keys, being careful to consider the appropriate voicing for instruments and/or voices.

7. Required Materials

A. EXAMPLES of typical college-level textbooks (for degree-applicable courses) or other print materials.

Book #1:

Author: Holmes, T.
Title: Electronic and Experimental Music: Technology, Music, and Culture
Publisher: Routledge
Date of Publication: 2015
Edition: Fifth

Book #2:

Author: Shepard, B. K.
Title: Refining Sound: A Practical Guide to Synthesis and Synthesizers
Publisher: Oxford University Press
Date of Publication: 2013
Edition:

B. Other required materials/supplies.