

MUSI-124: ELECTRONIC MUSIC

Justification for this inactivation request
Course not offered in 3 years.

Effective Term
Fall 2025

CC Approval
11/01/2024

AS Approval
11/14/2024

BOT Approval
11/21/2024

COCI Approval
03/13/2025

SECTION A - Course Data Elements

CB04 Credit Status
Credit - Degree Applicable

Discipline	
Minimum Qualifications	And/Or
Commercial Music (Any Degree and Professional Experience)	Or
Music (Master's Degree)	

Subject Code
MUSI - Music

Course Number
124

Department
Music

Division
Arts and Humanities (ARAH)

Full Course Title
Electronic Music

Short Title
Electronic Music

CB03 TOP Code
1004.00 - Music

CB08 Basic Skills Status
NBS - Not Basic Skills

CB09 SAM Code
D - Possibly Occupational

SECTION B - Course Description

Catalog Course 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.

SECTION C - Conditions on Enrollment

Open Entry/Open Exit

No

Repeatability

Not Repeatable

Grading Options

Letter Grade or Pass/No Pass

Allow Audit

Yes

Requisites

Advisory Prerequisite(s)

Completion of MUSI-110 with a minimum grade of C.

SECTION D - Course Standards

Is this course variable unit?

No

Units

2.00

Lecture Hours

18.00

Lab Hours

54.00

Outside of Class Hours

36

Total Contact Hours

72

Total Student Hours

108

Distance Education Approval

Is this course offered through Distance Education?

Yes

Online Delivery Methods

DE Modalities	Permanent or Emergency Only?
Entirely Online	Permanent
Hybrid	Permanent
Online with Proctored Exams	Permanent

SECTION E - Course Content

Student Learning Outcomes

Upon satisfactory completion of the course, students will be able to:

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

Course Objectives

Upon satisfactory completion of the course, students will be able to:	
1.	Recognize and define sound files: WAV (WAVEform), MP3 (*MPEG-1 Audio Layer 3), MIDI (Music Instrument Digital Interface), and AIFF (Audio Interchange File Format).
2.	Manipulate audio/MIDI files using various computer applications.
3.	Examine and apply sequencing techniques (layering of sound) in computer applications.
4.	Describe the principles of digital sampling.
5.	Create prescribed sounds utilizing various synthesis techniques.
6.	Create compositions and/or live performances using synthesis and/or MIDI.

Course Content

1. Computer Technology
 - a. Digital music vocabulary
 - b. Audio
 - i. Garage Band
 - ii. Audacity
 - c. Basic Notation Software
 - i. Sibelius
 - ii. Finale
 - iii. Modes of entry
 1. mouse
 2. alphabet
 3. step-time
 4. flexi-time entry
 5. keyboard/MIDI controller
 - iv. Arranging
 1. moving
 2. copying
 3. pasting
 4. adding layers
 - d. MIDI (Music Instrument Digital Interface)
 - e. Computer and Piano Keyboard Skills
 - f. Introduce WAV & MP3 & AIFF Files
2. Musicianship
 - a. Notation
 - i. staff
 - ii. notes
 - iii. rests
 - iv. rhythm
 - v. key
 - b. Arranging
 - i. timbre
 - ii. instrumentation
 - iii. texture
 - iv. voicing
 - c. Composition
 - d. Expressive markings, i.e., dynamics
 - e. Technique markings, i.e., marcato, tempo, tenuto
 - f. Transposition
 - g. Voicing
 - h. Musical Vocabulary
3. Sound Manipulation
 - a. Sequencing: layering tracks (4-8 tracks)
 - b. Editing
 - i. cut
 - ii. copy
 - iii. splice

- c. Altering frequencies
- d. Varying speed and pitch
- e. Sampling
- f. Sound effects
 - i. reverb
 - ii. delay
 - iii. chorus
 - iv. flange
- 4. 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)

Methods of Instruction

Methods of Instruction

Types	Examples of learning activities
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.

Online Adaptation

Types	Examples of learning activities
Activity	
Directed Study	
Discussion	
Group Work	
Individualized Instruction	
Journal	
Lecture	

Instructor-Initiated Online Contact Types

Announcements/Bulletin Boards
 Chat Rooms
 Discussion Boards
 E-mail Communication
 Telephone Conversations
 Video or Teleconferencing

Student-Initiated Online Contact Types

Chat Rooms
 Discussions

Group Work

Course design is accessible

Yes

Methods of Evaluation

Methods of Evaluation

Types	Examples of classroom assessments
Exams/Tests	Written exams on course concepts and presentation of original composition using synthesis of computer and outside captured sound components. Final Exam - Written and final compositional project. Mid Term - Written exam based on classroom lectures, including software, MIDI, audio and sampling techniques.
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.
Homework	Completion of homework assignments from MIDI textbook, handouts and oral critiques for classroom presentations.
Lab Activities	Work on group and individual projects.

Assignments

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.

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.

SECTION F - Textbooks and Instructional Materials

Material Type

Textbook

Author

Holmes, T.

Title

Electronic and Experimental Music: Technology, Music, and Culture

Edition/Version

5th

Publisher

Routledge

Year

2015

Material Type

Textbook

Author

Shepard, B. K.

Title

Refining Sound: A Practical Guide to Synthesis and Synthesizers

Publisher

Oxford University Press

Year

2013

SECTION G - Diversity, Equity and Inclusivity

Course Codes (Admin Only)

CB00 State ID

CCC000579670

CB10 Cooperative Work Experience Status

N - Is Not Part of a Cooperative Work Experience Education Program

CB11 Course Classification Status

Y - Credit Course

CB13 Special Class Status

N - The Course is Not an Approved Special Class

CB23 Funding Agency Category

Y - Not Applicable (Funding Not Used)

CB24 Program Course Status

Program Applicable

Allow Pass/No Pass

Yes

Only Pass/No Pass

No