MUSC 4750

Division: Fine Arts
Department: Music
Course: MUSC 4750
Title: Electronic Music
Catalog Description:

This course is required for students pursuing the B. Music degree in Commercial Music - Music Production track. Students will make an in-depth study of sythesis, its history and various forms. Students will also learn about Musical Instrument Digital Interface (MIDI), its history and uses as a pre-production and production tool.

General Education Requirements: N/A
Semesters Offered: TBA
Credit/Time Requirement: Credit: 3; Lecture: 2; Lab: 2
Clock/Hour Requirements: 0
Offered for Non-Credit: No
Prerequisites: MUSC 4450 Audio Recording Techniques I

Justification:

Along with the electric guitar, the synthesizer is one of the iconic instruments of the 20th century. Once the personal computer became a part of modern life, synthesizers became a very big part of modern music production and have continued to be until the present. A thorough understanding of synthesis, MIDI and the applications of both is necessary for any student graduationg with a BM degree in Music Production.

Student Learning Outcomes:

Upon completion of this course, students will be able to:

- demosntrate knowledge of the history of synthesized sound;
- demonstrate an understanding of the different types of synthesis and the methods and devices used to create the differing types;
- demonstrate the ability to digitally sample sound, edit samples and create sampled loops;
- demonstrate knowledge of the history of MIDI;
- demonstrate an understanding of MIDI programming;
- demonstrate an understanding of a variety of devices used as MIDI controllers;
- demonstrate an understanding of MIDI as a production and pre-production tool.

In addition, students will create an original piece of music or sound design that will be used as part of their pre-professional portfolio.

Content:

- Basic properties of electricity;
- Properties of sound;
- Synthesis - history;
- Synthesizer architecture - sound generators and processors;
- Types of synthesis: additive, subtractive, hybrid, digital;
- Digital sampling
- MIDI - history;
- MIDI - signal flow and setting up a studio;
- MIDI - programming;
- MIDI - controllers;
- MIDI in pre-production and production.

General Education Outcomes:

Applied Education Outcomes:

1) Students will acquire entry-level skills specific to and appropriate for employment in their chosen field of study.

The skills learned in this course will prepare students to work as a keyboard programmer or other MIDI-based technician. Students work will be assessed throughout the semester by the instructor who will provide both verbal and written feedback.

Key Performance Indicators:

Students in this course will be assessed using the following measures:

- Participation: Attendance at class sessions;
- Exam: Written and hands-on midterm;
- Exam: Written and hands-on final;
- Presentation: Final composition or sound design project.

Representative Text and/or Supplies:

Russ, Martin. Sound Synthesis and Sampling. Music Technology Publishers. Current edition.

Optimum Class Size: 12
Maximum Class Size: 14

Signatures:

I hereby submit this course syllabus:

Steve Meredith, DMA, Associate Professor

I hereby find this course consistent with the goals and resources of the Music Department:

Steve Meredith, DMA, Associate Professor, Chair

I hereby find this course consistent with the goals and resources of the Fine Arts Division:

Vance Larsen, MM, Associate Professor, Dean

I have discussed the need for library resources related to this class with the person submitting the syllabus:

Lynn Anderson, MLIS, Technical Services Librarian (Main Campus)

Michelle Olsen, MLS, Campus Librarian (Richfield Campus)