Sound Design / Introduction to Computer Music -- Elective

Course Description Sound Design / Introduction to Computer Music (with the possibility to be offered as a dual enrollment course) that introduces students to a broad range of topics and concepts in electronic and computer music. This course will cover principles of digital audio, sound design, synthesis, Digital Audio Workstations, and sound art composition. Assignments and activities include listening, analysis, discussion, and hands-on recording and composition exercises.

Course Objectives

- Demonstrate an understanding of conceptual approaches to computer music composition, including concepts from Musique Concrète, tape-based music, synthesizers, and audio processing.
- Demonstrate an understanding of technical issues related to computer music, including working with digital audio and using Digital Audio Workstation software.
- Demonstrate technical and analytical listening skills through presentations and discussions.
- Produce multiple creative artifacts through music composition projects.

Assessing Performance

Students are assessed by obtaining weekly grades on the following: Class Participation, Quizzes, Lab Assignments, Presentations, and Projects.

Course Essentials

| Equipment | Cost/Unit |
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| Reusable material | \$300 perstation (Presonus AudioBox Recording Kit or equivalent plus MIDI controller) |
| Classroom set of computers | \$0 if you already have them, \$800-1200 per computer if you need to purchase |

First Semester

| Unit 1: Introduction to DAW | A short introduction to the basic concepts of Digital Audio Workstation software and digital audio |
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| Unit 2: Tone and Noise | Understanding basics of sound and the use of tone and noise in music |
| Unit 3: Ideas and Theories | Examining multiple historical and modern perspectives on experimental music |
| Unit 4: Mini Composition 1 | Produce a short Musique Concrète style composition |
| Unit 5: MIDI and Synthesizers | Understanding MIDI recording and editing and synthesizer components |
| Unit 6: Mini Composition 2 | Produce a short composition using only synthesizers |

Second Semester

| Unit 7: Listening and Analysis | In-class listening sessions and analysis discussions, referring to existing analysis |
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| | guides |
| Unit 8: Presentations | Group presentations that demonstrate listening and analysis skills |
| Unit 9: Plugins and Processing | Introduction to various types of audio processing plugins |
| Unit 10: Peer Critique | In-class peer critique discussion of work-in-progress Final Project |
| Unit 11: Final Project | Produce a substantial original composition demonstrating a comprehensive |
| | understanding of technical an conceptual skills from the course |