

Survey of Music Technology

Last Updated: Thu, 07/31/2025

Course prefix: MUSI

Course number: 3450

Section: FC

CRN (you may add up to five):

91222

Instructor First Name: Frank

Instructor Last Name: Clark

Semester: Fall

Academic year: 2025

Course description:

The course examines the broader creative practices and technical pursuits in the inherently interdisciplinary world of music technology. This will be done primarily through a variety of hands-on projects which explore key concepts, essential tools, and creative techniques. Through a sequence of short but carefully structured projects, students will be composing music, writing code, and developing practical skills with a wide variety of applications. Additionally, key historical figures, landmark compositions, and important aesthetic practices that have shaped the discipline will be explored.

Course learning outcomes:

At the end of this course you will learn to:

1. Define and use a digital audio workstation
2. Create, edit, and deliver audio files
3. Create and edit MIDI data, and differentiate MIDI from audio data
4. Integrate and/or record digital audio in conjunction with MIDI sounds, sources, and tracks
5. Understand and apply terminology associated with digital audio and MIDI
6. Demonstrate basic audio recording and editing techniques
7. Explain and demonstrate the use of effects and filters in conjunction with the signal processing chain
8. Demonstrate multi-track audio editing and mixing in a DAW
9. Rationalize and apply the appropriateness of specific audio effects
10. Demonstrate familiarity and competency with software-based environments and/or object-oriented programming environments for music and sound such as Reaper,

MAX, Python, EarSketch, and Ableton Live

11. Explain and demonstrate frequency domain theory and applications
12. Identify and/or define synthesis types and techniques
13. Define major trends, techniques, and events in the history of music technology
14. Listen to and identify known and unknown major works in electronic and computer music by style, genre, and composer
15. Demonstrate familiarity with sound effects libraries and the associated copyright limitations
16. Discuss copyright issues related to recording and distribution

Required course materials:

None.

Grading policy:

METHOD OF EVALUATION:

The following evaluative tools will be utilized in measuring progress towards obtaining the class objectives:

- Projects (5)... 50%
- Exam 1..... 20%
- Exam 2.....20%
- Quizzes (5)...10%

TOTAL.....100%

All quizzes, exams, and projects will be graded by points. The final grade for the course will be determined by dividing the total points earned by the number of points possible for each of the categories listed in Method of Evaluation. These numbers will be converted into a grade according to the following scale: A=100-90%, B=89-80%, C=79-70%, D= 69-60%, F= 59% and below.

LATE WORK:

As concepts and projects in this class build on each other, it is imperative that all reading and listening assignments, and all projects, be completed on time. Projects will lose one full letter grade for each day they are late. For example, if a project is due on Monday and it is not turned in until Wednesday, then a grade of B would be lowered to a D. The only way to avoid this penalty is to obtain an extension in writing (or by e-mail) from the instructor in advance of the project deadline. In short, projects – as well as Quizzes and Exams – are due by the date listed in Canvas. Naturally, allowances can and will be made for documented illnesses, religious reasons, and family emergencies. Quizzes, Exams, and Projects cannot be made up unless there is a valid, documented excuse.

EXTRA CREDIT POLICY:

There is an abundance of Extra Credit available in this course. The MUSI 3450 Individual Grade Calculator should be used to determine how Extra Credit can positively impact your final grade. Please note that NO EXTRA CREDIT WILL BE COUNTED TOWARDS THE FINAL GRADE unless the following criteria are met:

1. The five creative projects are submitted earning an average grade of 70 or above.
2. The two Exams are taken earning an average grade of 65 or above.
3. All five Quizzes are completed earning an average grade of 70 or above.

Attendance policy:

- This is a fully online course. Thus, no attendance in the traditional sense is taken.
- It is strongly recommended that you log in on a regular basis to stay up to date on content and complete assigned Quizzes, Exams, and Concert Reports.
 - There are many Announcements in Canvas throughout the course. It is important to review them as they contain critical course and content information.

Academic honesty/integrity statement:

Students are expected to maintain the highest standards of academic integrity. All work submitted must be original and properly cited. Plagiarism, cheating, or any form of academic dishonesty will result in immediate consequences as outlined in the university's academic integrity policy.

Core IMPACTS statement(s) (if applicable):

This is a Core IMPACTS course that is part of the Humanities area. Core IMPACTS refers to the core curriculum, which provides students with essential knowledge in foundational academic areas. This course will help master course content, and support students' broad academic and career goals.

- This course should direct students toward a broad Orienting Question:
 - How do I interpret the human experience through creative, linguistic, and philosophical works?
- Completion of this course should enable students to meet the following Learning Outcome:
 - Students will effectively analyze and interpret the meaning, cultural significance, and ethical implications of literary/philosophical texts or of works in the visual/performing arts.
- Course content, activities and exercises in this course should help students develop the following Career-Ready Competencies:
 - Ethical Reasoning
 - Information Literacy

- Intercultural Competence