

HUMA 3107 Introduction to Electronic Music Composition

Course Syllabus

HKUST Spring 2025

Instructor:	Dr. Timothy PAGE
Email:	hmtpage@ust.hk
Office hours:	By appointment, Mon/Wed 11:00-12:00
Office:	SHAW 204
Instructional Assistant:	Alvin TAM : hmalvintam@ust.hk
Lectures: SHAW 105	L1 Wed 09:00 – 10:50
Tutorials: SHAW 105	T1 Wed 12-13, T2 Wed 13-14, T3 Wed 14-15

Course description

This course develops students' creativity, technical skills, and craft in working with live electronics in the production of sound. Using significant repertoire as points of reference, the course explores techniques for using software to manipulate and create sound in contexts such as: 1) live instrumental performance using combinations of acoustic instruments plus electronics, or electronic instruments only; and 2) sound installations. The course will culminate in an open concert-presentation of final works that students will have developed over the semester in consultation with the instructor. Students will be quite free to explore different possibilities for the format of this final project.

The primary software platform we will be using is the audio processing software and visual programming environment known as Max/MSP. Students will be given a temporary license to use this software for the duration of the Spring term, and are not required to purchase it separately.

In conjunction with the course, students will also have the opportunity to use the SHAW Electronic Music Studio for recording, mixing, or other applications relevant to their projects. Students who complete the course successfully will also gain rights to use the Electronic Music Studio in the future.

There is no final examination for this course. In lieu of a final, students will present their final projects to the class in a concert-like setting. A preliminary composition exercise is due in lieu of a midterm examination, and will be presented in class halfway through the term. Students will also submit a written analysis of a work of electroacoustic music from a list of selected repertoire.

Intended learning outcomes

On successful completion of the course, you will have learned to

- Organize sound creatively into coherent works of music for a live performance or sound installation context as a means of self-expression.
- Apply various technologies for controlling and processing audio in a live performance or sound installation context.
- Facilitate rehearsals and performance of works that use live electronics.
- Demonstrate knowledge of key works and historical trends in the field of electronic music.
- Demonstrate a deepened understanding of key issues of aesthetics in electronic music.

Prerequisites

Approval of the course instructor is needed for students to enroll in this course, which will be established via an entrance exam and a background questionnaire conducted on the first day of class. While there are no official prerequisite courses, students should have experience with DAW software and electronic music prior to enrolling – either via a course like HUMA2107 or equivalent self-study. Prior experience with notated instrumental composition (e.g. HUMA2103) will also be beneficial, especially for those who wish to compose for an acoustic instrument plus electronics.

Course Materials:

You will need to obtain a copy of the audio software Max/MSP. You will receive instructions on how to do this in lecture, and we will also provide a temporary license that will enable you to use the software for the duration of the term.

You will need your own laptop, which you will be asked to bring for lecture and tutorials, and which may be used in the realization/presentation of your final project.

Other equipment will be available for borrowing from the Electronic Music Studio as needed on a first-come, first-serve basis, though you will also be welcome to use any relevant equipment that you might already own or procure, such as digital audio interfaces, MIDI controllers, etc.

Course requirements

1. Weekly technical and creative assignments, which will be presented and evaluated in tutorial.
2. Attendance and participation: Much of what you learn will be assimilated via discussion and feedback on your work in lecture and tutorial. Therefore, attendance and participation are absolutely crucial in both lecture and tutorial. You must participate in discussions, as well as the presentation of your exercises and projects. Since you will be presenting your work in tutorials for evaluation and discussion, your attendance in tutorials is all the more essential. **Failure to attend tutorials will lead to you not receiving credit for homework assignments. Do not take this course if you cannot commit to attending all the tutorials.** Absences will only be excused if you provide medical documentation. No cell phones are allowed in class. If you have your cell phone out during lecture or tutorial you will receive a zero for participation that day, as if you were absent.
3. Midterm project: a short composition/performance that incorporates a Max/MSP patch.
4. Final project: A work for live performer with electronics, or a sound installation. In some cases this could be an expansion of the Midterm Project. We will explore the assignment in detail as the course progresses. **Attendance at the final concert in SHAW 103 on Wednesday, May 7, 19:00 - 21:00 is mandatory. Do not take the course if you can't attend this concert.**
5. Written assignment: A 3-page written review and analysis of a work of electroacoustic music chosen from a playlist to be assigned.
6. Attendance of **Cosmopolis Festival** events: **You are required to attend two events** from the Cosmopolis Festival, which is featuring off-season performances this Spring:

- 1) **Thale Makhene Quartet** (Fri, February 21, 7:30PM Shaw Auditorium Main Hall)
- 2) **Of Time and Love: HK Phil at HKUST** (April 12, 8:00PM or April 13, 3:00PM, Shaw Auditorium Main Hall)

*Note that there will also be a Rhythmic Workshop led by percussionist Thlale Makhene on Sat, Feb 22, which all are encouraged to attend, but is not mandatory.

Grading

Attendance and participation	17%
Portfolio of exercises/homework	17%
Written report	16%
Midterm project	21%
Final project	29%

Tentative Weekly Topics:

Week	Topic
1	Introduction – placement exam; musical applications of live electronics
2	Max MSP 1: overview of patching; Max, MSP, and Jitter;
3	Max MSP 2: event controlling, event scheduling; sequencing sound files
4	Max MSP 5: live audio signal processing 1
5	Max MSP 5: live audio signal processing 2
6	Max MSP 5: MIDI control; external controllers; OSC
7	Presentation of Midterm projects
8	Sound Installation 1: concept; site-specificity
9	Sound Installation 2: sensors, interactive elements
10	Live performance with Ableton Live 1
11	Live Performance with Ableton Live 2
12	Individual lessons, project development
13	Rehearsals and Presentation of final works. Concert on Wed, May 7 at 7:30PM

Cosmopolis Festival Summary:

For more information and registration, visit: https://cosmopolisfestival.hkust.edu.hk/upcoming_event