

Kenneth P. Dietrich School of Arts and Sciences
College in High School

2024-2025

Electronic Beat Making & Song Writing
MUSIC 1444--3 credits

Description/Objectives: This course provides an introduction to creating original music on the student's own laptop through a series of creative projects focusing on different technical topics, beat oriented musical styles, and introductory music theory concepts. Technical topics include audio sequencing, MIDI sequencing, effects, automation, live performance, sampling, and synthesis. This creative work will be complimented by regular listening discussions of a variety of musical styles such as Hip Hop, House, Techno, Dub Reggae, Heavy Metal, Dubstep, Singer-Songwriter, and more. Students will also be asked to write a series of reflection essays on topics such as the creative process, cultural appropriation, and the development of their own artistic voice, which will be paired with related readings.

Prerequisite: None.

Grading: This is a creatively focused course. Although class time will be allotted to independent creative work, students should expect to spend at least 2-3 hours each week outside of class working on their Ableton projects and completing any assigned readings and writing assignments.

Textbook: There is no textbook associated with this course.

Required hardware and software:

1. A laptop (Windows or Mac) with a 64-bit operating system.
2. Ableton Live 11 Intro. (cost: \$59 with educational discount) Ableton Live is both a powerful piece of software for the creation of electronic music, and a user-friendly tool that gives beginners everything they need to immediately start making music. Students may use other versions of Ableton at the instructor's discretion. Students are also welcome to start with the Ableton free trial, which lasts for 90 days.
3. Stereo headphones. Wired recommended, as Bluetooth introduces latency.

Optional hardware:

1. A USB MIDI keyboard or other controller(s).
2. A USB microphone. (or XLR mic plus USB interface)

Course requirements/grading:

Participation: 15%

Students will be expected to regularly respond to listening questions regarding musical examples, to share their own work, and to provide each other with feedback on their projects. Students will also be required to spend time in class working on their projects.

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Reflection essays: 10%

At least three reflection essays will be assigned covering topics such as the creative process, cultural appropriation, and the development of the students' own creative voice. Readings will be assigned to compliment the written assignments. Examples of required readings include "6 Artists Talk about Their Creative Processes" by DJ Pangburn and "Sampling, Stealing And Influence: Music and Cultural Appropriation" by Georgina Quach.

Numbered Projects: 60%

6 creative projects in Ableton, each concerning different techniques and concepts. These will be students' own original musical compositions. Students are welcome to include samples/quotations from external sources, but each piece should be a new work that students feel they can call their own.

The projects are tentatively as follows:

Project 1: An 80's Hip Hop inspired beat consisting primarily of short audio samples of individual drum/cymbal hits.

Project 2: A MIDI sequenced song combining bass, melody, chords, and drums.

Project 3: An effects/automation oriented composition created after an exploration of Dub Reggae and early House and Techno. Effects used will include reverb, EQ, and compression.

Project 4: A live-improvised Session-View piece inspired by the AKAI MPC. (a classic piece of digital technology used by many Hip Hop musicians, especially in the 90's)

Project 5: Music created around Ableton's "Simpler" sampler plugin. This project will be accompanied by a discussion of the legal/ethical concerns surrounding sampling and copyright, especially with regards to cultural appropriation.

Project 6: A software-synthesis based song inspired by genres such as Synthwave and Chiptunes.

Final Project: 15%

An open-ended creative project utilizing a variety of techniques covered in class where students are encouraged to discover their own artistic voice while acknowledging the influences they are drawing on.

Grading Scale:

93-100% = A
90-92.9% = A-
87-89.9% = B+
83-86.9% = B

80-82.9% = B-
77-79.9% = C+
73-76.9% = C
70-72.9% = C-

67-69.9% = D+
63-66.9% = D
60-62.9% = D-
0-59.9% = F

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Attendance policy

It is the student's responsibility to contact the instructor about missed work any time they miss class and to request that an absence be excused.

Late work policy

Submitting assignments on-time is crucial in keeping up with the pace of the class. If students are facing difficulties in completing their assignments in a timely manner, they should contact the instructor immediately for guided help. Late submission will result in the assignment grade being lowered by 10 percentage points. If a student chooses to submit an assignment late, it is their responsibility to notify the instructor.

Tentative schedule of topics and assignments:

1. Introductions. Nature of sound/graphs.

Origins of Hip Hop in Black American culture from NYC

- Listening: 80's Hip Hop
- Reading: "6 Artists Talk about Their Creative Processes" by DJ Pangburn

2. Digital audio theory and sequencing

- Listening: Ambient
- Project 1-1 due: Audio beats/soundscape
- Reflection Essay 1 due: Responding to the Creative Processes of Others

3. MIDI sequencing and instruments

- Listening: Krautrock
- Readings: Technical topics covered so far
- Project 1-2 due: Audio beats/soundscape

4. More MIDI. Origins of EDM with LGBTQ

People of Color from Chicago

- Listening: House
- Reading: "The beautiful black gay history of Chicago house's birth" by Jack Needham
- Project 2-1 due: MIDI song

5. Effects: Reverb, EQ. Early usages of effects and remixing in Dub Reggae

- Listening: Dub Reggae. Techno
- Reading: Technical topics covered so far
- Project 2-2 due: MIDI song

6. Compression. Automation

- Listening: More Techno. Industrial
- Project 3-1 due: Effects and automation

7. Live performance techniques

- Listening: IDM
- Project 3-2 due: Effects and automation

8. Other Effects and more live performance

- Listening: Dubstep. 90's Hip Hop
- Project 4-1 due: Live Performance/other FX

9. Samplers. Legal/ethical/copyright issues related to sampling. Cultural appropriation

- Listening: More 90's Hip Hop
- Reading: "Sampling, Stealing And Influence: Music And Cultural Appropriation" by Georgina Quach
- Project 4-2 due: Live Performance/other FX

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10. More sampling. Electronic music techniques in unexpected places

- Listening: Djent. Indie/singer songwriter/lo-fi
- Project 5-1 due: Sampling with simpler
- Reflection Essay 2 Due: Cultural Appropriation and the Ethics of Sampling and Stylistic Borrowing

11. Synthesis and external plugins. Early video game sound chips

- Listening: Chiptunes. Synthwave
- Readings: Technical topics covered so far
- Project 5-2 due: Sampling with simpler

12. More synthesis. Hip Hop's global influence on a variety of genres

- Listening: Recent Hip Hop and Hip Hop inspired music
- Project 6-1 due: 4-voice Synthesis song with an external plugin

13. Discussion of final projects. More effects

- Listening: More recent Hip Hop and dance music
- Project 6-2 due: 4-voice Synthesis song with an external plugin

14. Review and final project drafts listening

15. Final Projects Listening Session

- Final Project due – Mastered two song single
- Reflection Essay 3 Due: Describing your creative process

Additional Course Credit Information for MUSIC 1444:

At the University of Pittsburgh, course credits can count in three ways: toward the requirements for a major, toward elective requirements, and/or toward the total number of credits needed to graduate. For this course:

- Majors: This course can count toward departmental majors and minors
- Electives: Individual Schools and Colleges of the University (such as Engineering, Arts & Sciences, Business, Computing & Information, and so on) have different policies about elective credits and may count this course as an elective. Students interested in studying at the University of Pittsburgh should contact their School/College of interest to see if this course would be counted
- Graduation: This course's credits count toward the number of credits needed for graduation

Academic Integrity: All College in High School teachers, students, and their parents/guardians are required to review and be familiar with the University of Pittsburgh's Academic Integrity Policy located online at <https://www.as.pitt.edu/faculty/policies-and-procedures/academic-integrity-code>.

Grades: Grade criteria in the high school course may differ slightly from University of Pittsburgh standards. A CHS student could receive two course grades: one for high school and one for the University transcript. In most cases the grades are the same. These grading standards are explained at the beginning of each course.

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Transfer Credit: University of Pittsburgh grades earned in CHS courses appear on an official University of Pittsburgh transcript, and the course credits are likely to be eligible for transfer to other colleges and universities. Students are encouraged to contact potential colleges and universities in advance to ensure their CHS credits would be accepted. If students decide to attend any University of Pittsburgh campuses, the University of Pittsburgh grade earned in the course will count toward the student grade point average at the University. At the University of Pittsburgh, the CHS course supersedes any equivalent AP credit.

Drops and Withdrawals: Students should monitor progress in a course. CHS teacher can obtain a Course Drop/Withdrawal Request form from the CHS office or Aspire. The form must be completed by the student, teacher and parent/guardian and returned to teacher by deadlines listed. Dropping and withdrawing from the CHS course has no effect on enrollment in the high school credits for the course.