Laptop Orchestra

Course prefix: MUSI

Course number: 2015

Section: LEC/LAC

CRN (you may add up to five):
28634 28628

Instructor First Name: Jeremy

Instructor Last Name: Muller

Semester: Spring

Academic year: 2026

Course description:

This class will focus on analysis, rehearsal, creation, and performance of music for an ensemble of computing devices such as laptops, tablets, or mobile phones.

Course learning outcomes:

After successful completion of the class, students will demonstrate

- the musicianship, critical listening, improvisation, and collaboration skills necessary to perform open-form and structured improvisation works in ensembles of computing devices
- the ability to design sounds, gestural interfaces, and mappings to create virtual instruments on computing devices, using both music production and algorithmic approaches
- an understanding of the foundations of sound synthesis, interactive music, laptop and mobile phone orchestras, structured improvisation, and open-ended notation
- the ability to create new musical works with textual, graphical, and/or animated scores

Required course materials:

You are expected to bring the following to class each day:

- A Mac or Windows laptop, fully charged.
- An Android or iOS phone or tablet, fully charged.
- Headphones or earbuds.

You will be provided the following to use for the duration of the semester:

- One 1/8" stereo cable.
- One battery powered, rechargeable speaker.

You are responsible for bringing these to each class meeting (fully charged) and for keeping these items in good condition. If you lose or damage them during the semester, you will be expected to replace them at your own cost.

Our intention is to only use software for this course that is free / open-source, with one important exception: TouchOSC. You will need to purchase TouchOSC for your iOS or Android device from its respective app store. The cost is $19.99. We will provide you with a license to use the TouchOSC desktop app editor (for Mac or Windows). You only need to pay for the mobile version yourself.

The other software we will rely on includes VCV Rack and some software written specifically for the performance of pieces on our concerts.

Grading policy:

Attendance, Participation, and Preparation, Mid-term Quiz, Short Assignments, Final Project

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.

Attendance policy:

Attendance is required. If you are unable to attend a class, you need to email the instructor at
least 2 hours before the class begins, and will need to make up the class assignments within 48
hours. Absences during presentations must be discussed with the instructor.

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.