

# Music 446 Sound Synthesis Design for Electronic Music

Fall 2017 Mondays 3:10-4:00pm, Wednesdays 3:10-4:00 & 4:10-5:00

Music Computer Lab (056 Music Hall)

Instructor: Dr. Christopher Hopkins [hopkinsc@iastate.edu](mailto:hopkinsc@iastate.edu)

In-lab office hours: M/W 2:10 pm (Music Computer Lab), general office hour as posted

## Prerequisites

Music 246 (Introduction to Creative Digital Music) or permission of instructor.

## Course Description and Learning Outcomes

By the end of term students will understand fundamental theories and practices of software-based sound synthesis design for musical applications. Students will become proficient in the use of a visual programming environment to synthesize sound and use this in musically meaningful ways.

The course will include lectures in sound synthesis techniques, practical lab exercises, and creative projects in both instrument design and electronic music composition. A detailed course outline will be provided online.

## Course Policies

### Software and Rules for Completion of Assignments

The computer platform and software to be used in the course is

Macintosh OS (10.12 or above)

Sound Synthesis: Kontakt 5, Reaktor 6

Sound Editing, Composition, Mixing/Post-processing: Audition and Pro Tools 12

Composition: Max 7 (not required but available as an option if a student has taken Music 346)

A uniformity in programming tools and software is required for this course. Students may not use alternate software to complete assignments, projects, and presentations. Further, all assigned work must be submitted for examination in project files (instrument, ensemble, and session files) rather than as premixed audio.

All software and digital audio equipment required for the course is provided in the music computer lab, 056 Music Hall. There is ample open lab time to complete all assignments. Students do not need to purchase software or equipment. Students who own the required software may complete assignments using their own equipment but are responsible for supporting their own systems, including any required adjustments to files and settings for compatibility with the music computer lab. Files that do not run because they were developed outside the music computer lab will be considered incomplete and may receive a failing grade.

### Evaluation and Grading

Student work will be evaluated through project presentations and examinations. Both written exams will cover information from both lecture, labs, and assigned readings. The creative projects will be assigned a grade based on both creative extension (how far ideas for electronic-musical sound is developed) and technical execution (how efficient is the programming and instrument design). See attached explanation of my guidelines for grading creative work.

The grade for the course will be determined solely by the instructor, using the following guidelines:

35% Completion and presentation of Creative Labs (6)

(the lowest creative lab grade will not be applied, but only if all six are completed)

20% Completion and presentation of Unit Projects (2)

30% Written Unit Examinations (2)

15% Completion and presentation of Final Project (required to pass the course)

Unexcused late work will not be accepted. All creative labs and unit projects must be presented to the class on the dates due. The final exam period will be used for presentation of the Final Project. If a valid excuse exists for the failure to present the final project as scheduled, the instructor will determine the method of compensation in calculating the grade for the course. Grades of Incomplete (I) will be granted only in accordance with university policy. In general, incompletes may be granted in cases of medical or family emergency and must be supported by a valid written excuse.

## Uniform University Policies

### Academic Dishonesty

The class will follow Iowa State University's policy on academic dishonesty. Anyone suspected of academic dishonesty will be reported to the [Dean of Students Office](#).

### Accessibility Statement

Iowa State University is committed to assuring that all educational activities are free from discrimination and harassment based on disability status. Students requesting accommodations for a documented disability are required to meet with staff in Student Accessibility Services (SAS) to establish eligibility and learn about related processes. Eligible students will be provided with a Notification Letter for each course and reasonable accommodations will be arranged after timely delivery of the Notification Letter to the instructor. Students are encouraged to deliver Notification Letters as early in the semester as possible. SAS, a unit in the Dean of Students Office, is located in room 1076, Student Services Building or online at [www.sas.dso.iastate.edu](http://www.sas.dso.iastate.edu). Contact SAS by email at [accessibility@iastate.edu](mailto:accessibility@iastate.edu) or by phone at 515-294-7220 for additional information.

### Dead Week

This class follows the Iowa State University Dead Week policy as noted in section 10.6.4 of the [Faculty Handbook](#).

### Discrimination and Harassment

Iowa State University does not discriminate on the basis of race, color, age, ethnicity, religion, national origin, pregnancy, sexual orientation, gender identity, genetic information, sex, marital status, disability, or status as a U.S. Veteran. Inquiries regarding non-discrimination policies may be directed to Office of Equal Opportunity, 3410 Beardshear Hall, 515 Morrill Road, Ames, Iowa 50011, Tel. 515-294-7612, Hotline 515-294-1222, email [eooffice@iastate.edu](mailto:eooffice@iastate.edu)

### Religious Accommodation

Iowa State University strives to reasonably accommodate students who's sincerely held religious beliefs or creed conflict with academic requirements. Accommodation requests must be made proactively. The process for requesting an accommodation is interactive and the process must be initiated by the individual seeking the accommodation. For optimal consideration, students should inform instructors as soon as possible in the semester of a course conflict. It is recommended that the student and instructor discuss the request in person and then document the resolution in an email format. Assistance throughout the process for all parties involved is available through the [Office of Equal Opportunity](#) at 515-294-7612.

### Contact Information

If you are experiencing, or have experienced, a problem with any of the above issues, email [academicissues@iastate.edu](mailto:academicissues@iastate.edu)