Music 256a / CS 476a
Music, Computing Design: The Art of Design
Stanford University | Fall 2023
MW 3:30-5:20pm

Instructors

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Course Website

https://ccrma.stanford.edu/courses/256a/

Course Overview

This course explores the artful design of interactive musical software, tools, instruments, toys, and games. Topics include strategies for crafting interactive systems, audiovisual design, game design, and the aesthetics dimension of shaping technology in our world today. Course work features several programming assignments, short weekly reading responses, an emphasis on critical design feedback, and a "design your own" final project. You will learn to create systems using Chunity (ChucK + Unity). Prerequisite: experience in C/C++, Java, or Unity.

Teaching Philosophy

We firmly believe that anyone can learn anything to which they put their earnest effort and thought. In this course, we also believe the answers to questions are secondary and sometimes even irrelevant. What truly matters here are the *thoughtfulness* of the questions we frame and *effort* we put into the craft of designing things. Above all, our aim is for each student to acquire for themselves both "things to create with" and "things to think with" as tools that will stay and grow with them for years to come.

Course-specific Learning Goals

As a student, you will be able to (in ranked order of priority):
   1) offer clear and critical evaluations of design—including those of your peers—taking into account functional, aesthetic, cultural contexts.
   2) conceptualize and prototype software systems, integrating audio, graphics, and interaction.
   3) demonstrate working knowledge of the tools used in this course (e.g., interactive audiovisual programming in ChucK and Unity).

Textbook

Ge Wang, *Artful Design: Technology in Search of the Sublime.* 2018.
(available from Stanford Bookstore, who will price-match at register Amazon, B&N)
Some buying options: https://artful.design/buy.html

Workload Expectations
Students are expected to devote at least four hours of preparation out of class for each 80 minutes of class time, for a minimum of eight hours of preparation per week.

Grading Expectations
Your work will be evaluated on completion, thoughtfulness, effort—in short, the personal integrity with which you carry out your work. We do not grade based on "objective quality". Grades will be assigned based on the completion, thoughtfulness, and effort in the following:
- Weekly written responses to readings (20%)
- Design assignments and etudes (30%)
- Final project (20%)
- Milestone Presentation and general participation (30%)

Class meetings are synchronous; attendance is required
Attendance at lectures and milestones are synchronous and required. If a student falls ill or have a personal situation that would affect their ability to attend, the student should contact the instructors before missing lecture or section. Under certain conditions (including illness), a student may be provided an opportunity to make up the work missed in section.

Course Policies
1. Participation in milestone presentations and discussion is a significant part of your grade (30%). Please join class meetings on time, showing evidence of having done the work (readings, assignments, milestones) by sharing your questions, analyses, critiques, and informed comments.

2. As a general rule, no late work will be accepted. However, we will do our best to accommodate extenuating circumstances. Please contact the instructors as early as possible in these cases.

3. Please think of this course in lectures and sections as a safe place to be yourself and while respecting others. As we will examine in class, the Platinum Rule states "always treat others as they would have you treat them."

Assignments and Evaluation
• **Weekly reading responses**: these written responses should be 400-500 words in length, and clearly demonstrate understanding of the material. They should favor reflection over synopsis. Feel free to pose well-framed questions in your responses.

• **Design Assignments/Designs**: these directed exercises involve observation, reflection, and software design, and peer critique.

• **Final Project**: the medium-scale project asks students to conceptualize and prototype an artfully designed interactive music software system, using the Chunity (ChucK + Unity) and integrating real-time audio, interaction, and graphics.

The Honor Code

Violating the Honor Code is a serious offense, even when the violation is unintentional. The Honor Code is available at the URL below. Students are responsible for understanding the University rules regarding academic integrity. In brief, conduct prohibited by the Honor Code includes all forms of academic dishonesty, among them copying from another's exam, unpermitted collaboration and representing as one's own work the work of another. If students have any questions about these matters, they should contact their fellow.
https://studentaffairs.stanford.edu/communitystandards/honorcode

FERPA: Student Record Privacy Policy

http://studentaffairs.stanford.edu/registrar/students/ferpa

Students with Documented Disabilities

Students who may need an academic accommodation based on the impact of a disability must initiate the request with the Office of Accessible Education (OAE). Professional staff will evaluate the request with required documentation, recommend reasonable accommodations, and prepare an Accommodation Letter for faculty dated in the current quarter in which the request is being made. Students should contact the OAE as soon as possible since timely notice is needed to coordinate accommodations. The OAE is located at 563 Salvatierra Walk (phone: 650-723-1066; web: http://oae.stanford.edu).