ART 112: DIGITAL MEDIA I

Tuesday / Thursday 8:50–11:20, Fields 205
https://github.com/brianhouse/ART112

Prof. Brian House, brianhouse@lclark.edu
Office hours by appointment
Code studio open Monday 13:00–15:00

Course Description

Introduction to computer programming for artists. With creative coding, students will explore graphics and animation, sound, real-time video processing, the web, physical sensors, and augmented reality. Accompanying critical discussion will unpack historical and contemporary issues in digital media. Through practical and theoretical investigations, students will gain a foundation for working with digital form. No prior experience is required.

Objectives:

- Cultivate an ability to think abstractly in terms of algorithms
- Understand the broad historical context of contemporary digital tools
- Survey contemporary artists working formally with code and digital media
- Build a foundation for expanding into other areas of media art practice
- Gain proficiency programming in javascript with p5.js

Assignments and Grading

Sketches

This course is built around a progression of open-ended code "sketches" that progress through the use of text, images, animation, sound, video, and various forms of physical interaction. We will begin each one during class time, and you will (usually) complete them as homework. Starting with Week #4, you will post sketches online through your GitHub account. Sketches will be critiqued during class in small groups.

Sketches cumulatively account for 90% of your final grade. In order to receive credit for your sketch, you must post a version of the code to your GitHub account and email me the link *before* the class that it is due. However, you may continue to make changes indefinitely and improve your grade if necessary. I will grade the sketches as follows:

- *unsatisfactory* sketches fail to fulfill the basic requirements of the exercise
- *satisfactory* sketches are functional and conceptually sound as expected
- *exemplary* sketches show a level of refinement and/or experimentation beyond the basic requirements

Survey presentations

Each student will give a 10-minute presentations on an artist working in digital media. These presentations, which should be organized in slides, should give an overview of the context in which the artist is working and show one or two artworks in detail. Students should comment thoughtfully on how the work relates to themes discussed in class as well as to their own practices. Students will choose artists to present from an approved list on a first-come, first-served basis. These presentations make up 10% of your final grade.

Reading

Each week we will read short primary texts in class that are important to the development of digital form. These will be provided in class.

In addition, it is recommended that you purchase Getting Started with p5.js: Making Interactive Graphics in JavaScript and Processing by Lauren McCarthy, Casey Reas, and Ben Fry for a general reference that will be helpful throughout the course.

Attendance and participation

You must attend and thoughtfully participate in every class. An unexcused absence will result in a reduction of your final grade by 5%. Excused absences must be discussed with me *prior* to the class to arrange for completing missed work. Being late twice will be treated as the equivalent of one absence. **Use of social media in class twice will also be treated as the equivalent of one absence.**

Resources and Policies

Syllabus

The version of this syllabus posted online will be updated periodically and is the definitive version. It is your responsibility to consult it and stay up-to-date.

Course Fee

There is a course fee automatically paid through student accounts when registered for this class. The fee helps cover software licensing and sensor hardware. However, open source software will be used whenever possible.

Laptop Use

Work for this course should be done on a personal laptop—recent hardware and MacOS is preferred. If you do not have access to a laptop, email me and we will make arrangements for you to borrow a machine.

Code Studio

All students must complete their own work but are encouraged to help each other. To facilitate collective learning, Fields 205 will be open for working on ART112 sketches and other code projects at the times posted above.

Academic Integrity

Please refer to the policy on Academic Integrity available on the College's 'Policies and Procedures' webpage. The work submitted in Digital Media courses must be conceived of and programmed by you. While learning from and incorporating code from other sources is a natural part of programming (e.g. Stack Overflow and OpenProcessing), you must demonstrate understanding and intentionality in your work, and you may not copy and paste others' code wholesale. Always credit your inspirations and be confident in your original concepts.

Accommodations

If you have a disability that may impact your academic performance, you may request accommodations by submitting documentation to the Student Support Services Office in Albany Quadrangle (x7156). Staff in the SSSO will notify me of the accommodations for which you are eligible; please also make an appointment to discuss with me personally.

Schedule

Week 1

Tuesday 9/3

- Introduction
- In-class reading and discussion: Sol Lewitt and Yoko Ono

Thursday 9/5

- Overview of LOGO
- In-class sketch and crit, Sketch #1: Turtle drawing

Week 2

Tuesday 9/10

- Survey presentations 1:
- In-class reading and discussion: Alan Turing, "Computing Machinery and Intelligence" (1950)
- Introduction to BASIC
- **Homework**: install virtualii and play Zork

Thursday 9/12

- Begin Sketch #2: Narrative Maze
- Code Studio

Week 3

Tuesday 9/17

- Narrative Maze crit
- Introduction to HTML
- **Homework**: read Tim Berners-Lee, "The World-Wide Web" (1994)

Thursday 9/19

- Begin Sketch #3: Web Mod
- Code Studio

Week 4

Tuesday 9/24

- Survey presentations 2:
- Web Mod crit
- In-class reading and discussion: Harold Cohen, "What's an Image?" (1979)
- Introduction to p5.js

Thursday 9/26

- Begin Sketch #4: Digital Interpretation
- Code Studio

Week 5

Tuesday 10/1

- Survey presentations 3:
- Digital Interpretation crit
- In-class reading and discussion: Lillian Schwartz, from *The Computer Artist's Handbook* (1992)

Thursday 10/3

- Begin Sketch #5: Generative Screensaver
- Code Studio

Week 6

Tuesday 10/8

- Survey presentations 4:
- Generative Screensaver crit
- Begin Sketch #6: Drawing Tool

Thursday 10/10

FALL BREAK—NO CLASS

Week 7

Tuesday 10/15

- Survey presentations 5:
- In-class reading and discussion: Alan Kay, "A Personal Computer for Children of All Ages" (1972)
- Code Studio

Thursday 10/17

- Code Studio

Week 8

Tuesday 10/22

- Survey presentations 6:
- Drawing Tool crit
- In-class reading and discussion: Tara Rodgers interviews Laetitia Sonami (2004)

Thursday 10/24

- Begin Sketch #7: Touch Instrument 1 (Part 1)
- Code Studio

Week 9

Tuesday 10/29

- Survey presentations 7:
- In-class reading and discussion: Laura Kurgan, "You Are Here: Information Drift" (1994)

Thursday 10/31

- Begin Sketch #7 cont'd: Touch Instrument 2 (Part 2)
- Code Studio

Week 10

Tuesday 11/5

- Survey presentations 8:
- Touch Instrument crit
- In-class reading and discussion: Rosa Menkman, "Beyond Resolution" (2018)

Thursday 11/7

- Begin Sketch #8: Magic Mirror
- Code Studio

Week 11

Tuesday 11/12

- Magic Mirror crit
- In-class reading and discussion: Mark Weiser, "The Computer for the 21st Century" (1991)
- Introduction to Arduino

Thursday 11/14

- Begin Sketch #9: Heartbeat Amplifier
- Code Studio

Week 12

Tuesday 11/19

- Code Studio

Thursday 11/21

- Heartbeat Amplifier crit
- Code Studio

Week 13

Tuesday 11/26

- Introduction to projection mapping
- In-class reading and discussion: Ali Momeni and Stephanie Sherman, "A Manual for Urban Projection"

- Begin Final Project: Projected Worlds

Thursday 11/28

THANKSGIVING BREAK—NO CLASS

Week 14

Tuesday 12/3

- Code Studio

Thursday 12/5

- Code Studio

Week 15

Tuesday 12/10

- Prepare final work

Exam Week

Tuesday 12/17 18:00–21:00

Final work projected on campus