

New York University
Department of Media, Culture, and Communication
Advanced Coding Workshop
Course number MCC-UE 1154 -- SPRING 2025

Prof. Alexander R. Galloway
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Office hours: Tu 2pm-4; Wed 10am-12pm

Time: Tue & Thurs: 11am-12:15pm
Location: 239 Greene St., #712

Advanced Coding Workshop is a practice-based course designed to teach intermediate and advanced programming skills in the context of media studies and cultural theory. Students will acquire expertise in four areas: images, characters & strings, games, and networks. Each area spans two weeks, and culminates in a codework assignment and quiz. At the end of the term, students will design and build their own final projects. The course is taught using Processing, specifically p5.js, although the concepts and techniques learned here are transferable to other languages and other coding environments. The course acts as a sequel to Creative Coding (MCC-UE 1585), which also serves as a prerequisite.

SCHEDULE

I. Processing Review & Boot Camp

Jan 21 & 23: Review of basic concepts; introduction to more advanced tools.
Jan 28 & 30: Codework 1 due; Quiz 1.

II. Images

Feb 4 & 6: Image and video processing; OpenCV; glitches; image compression.
Feb 11 & 13: Codework 2 due; Quiz 2.

Feb 18 -- no class (NYU classes meet according to a Monday schedule).
Feb 20 -- TBD

III. Characters & Strings

Feb 25 & 27: Text parsing; regular expressions; ASCII and Unicode.
Mar 4 & 6: Codework 3 due; Quiz 3.

IV. Games

Mar 11 & 13: Sprites; collisions; dragging objects; picking and z-order; Perlin noise.
Mar 18 & 20: Codework 4 due; Quiz 4.

Mar 25 & 27 -- Spring Break

V. Networks

Apr 1 & 3: Client/server requests; interfaces; APIs; JSON.

Apr 8 & 10: Codework 5 due; Quiz 5.

Apr 15 & 17: TBD

Super Quiz

Apr 22 -- Super Quiz review.

Apr 24 -- Super Quiz.

Final Project

Apr 29 & May 1 -- Final project troubleshooting & workshopping.

May 6 -- Final presentations & code review.

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Course Requirements

- *Participation and Attendance* -- All students are expected to attend and participate in class. Readings, screenings, and additional homework will be distributed as needed.
- *Codework* -- Programming assignments (a.k.a. "codework") are due every two weeks, with a total of five codework assignments for the semester.
- *Quizzes* -- In-class coding quizzes will be administered every two weeks, followed by a "Super Quiz" toward the end of the semester. The Super Quiz is cumulative and counts twice as much as normal quizzes.
- *Final project* -- Each student will design and build a final project.

Grade Formula

- Participation and Attendance: 25%
- Codework assignments & quizzes: 50%
- Final Project: 25%