

Sample Syllabi - Subject to Change

Intro. to
Creative Coding
CMSC 19911

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Course description

Creative Coding is an introductory programming class, using the JavaScript programming language and the p5.js JavaScript library. We will make things that use various digital media, such as vector and raster graphics, fonts and text, dynamic and interactive animations, and web applications.

No prior experience with coding, or creativity, is required.

cs111: This summer course is based on [CMSC 11111](#) (pronounced "cs one-eleven"), so you will see that number in a few places across the course materials.

Course staff

Instructor



Ravi

Why did we make this course?

I want you to learn how to program, and have fun with it. And

selfishly, I want excuses to write creative code and code for creative coding.



StoryBots: "Professions" (by Netflix Jr.)

What is pS.js?

p5.js

From the [pS.js website](#):

pS.js is a JavaScript library for creative coding, with a focus on making coding accessible and inclusive for artists, designers, educators, beginners, and anyone else!

Among the many wonderful parts of their tools and of their community is the [pS.js Web Editor](#), which makes it extremely easy to get started sketching code directly in the browser.

For this class, we have forked and customized the web editor, described next.

Course materials

The **SCHEDULE** is the main hub for the course, where you will

find all readings and assignments.

Class meetings

During class, we'll have a mix of discussion and group exercises. After class, you will finish exercises, as needed, and work through any readings.

Code editor

Our custom fork of the web **EDITOR** is the place to do all your work. You will submit all exercises and homework assignments through the editor.

The editor will automatically create "pull requests" in your GitHub Classroom repo, with appropriate folders containing your submissions. After you tell us which GitHub USERNAME (distinct from your CNetID) to use for the course, your submission repo will live at:

<https://github.com/UChicago-PL/cs-111-USERNAME>

What to read?

There are no required textbooks for the course.

We are borrowing many delightful pS.js and JavaScript tutorials written by [@KevinAWorkman](#) at [Happy Coding](#). We are hosting these tutorials locally on our site with small changes specific to our course. Thank you Kevin!

Happy Coding

Later in the course, after we get the basics under our belts, we will write or link to additional reading material as well.

Several exercises and assignments will be inspired by *Code as Creative Medium* by [@Golanlevin](#) and [@TegaBrain](#).



This book is a gem, filled with a variety of ideas and prompts for creative coding projects. It may be particularly handy as you brainstorm concepts for independent projects.

Beyond the countless JavaScript tutorials and books you might seek out, the pS.js page recommends some [books](#).

How do grades work?

50% = ~12 * practice exercises
50% = 6 * homework assignments
0% = optional project

Practice exercises

During class, we will regularly Breakout into groups to get to know your creative and colorful classmates, and to work on Practice Exercises together.

We will try *virtual mob programming*, where one person shares their screen and drives but everyone works together. Writing code, talking code, and working together are all important programming skills that require practice. (And [mobs](#) rule.)

Some Practice Exercises are designed to be completed during breakout time, but others may require more work at home.

Early in the course, we will decide whether to form new random groups for every class or whether to form stable groups.

Practice exercises: grading

Even though one meerkat is driving during breakout sessions, **everyone** should submit each Practice Exercise. These frequent exercises aim to foster your engagement and learning; there is no substitute for typing up code with your own digits.

Each Practice Exercise is due at 12pm CT before the next class meeting. These exercises will be graded solely on whether or not you submitted the assignment.

Homeworks

Each week, there will also be one larger programming assignment, generally due at 5pm CT near the end of the week.

Sometimes we will post-process the work done by the class to make a collective piece.

All homework assignments are meant to be done individually. See the Academic Integrity policy below.

Homeworks: grading guidelines

Homeworks will be graded with an assignment-specific rubric that involves factors pertaining to your canvas, as well as the code which generates it.

We won't be extremely strict about code style, but generally you should follow [Mozilla's JavaScript guidelines](#) as well as the [JSHint hints](#) that are provided by the code editor.

Homeworks: late submissions

Barring extenuating circumstances with requests approved in advance, a late homework submission will receive

- a 25% penalty if within 1 day after the deadline,
- a 50% penalty if 1-2 days after the deadline,

- a 75% penalty if 2-3 days after the deadline, and
- zero credit if 3 or more days after the deadline.

Any other course policies?

Diversity

[Borrowed from Stuart Kurtz and then adapted]

The University of Chicago is committed to diversity and rigorous inquiry that arises from multiple perspectives. We concur with this commitment and also believe that we have the highest quality interactions and can creatively solve more problems when we recognize and share our diversity. We expect to maintain a productive learning environment based on open communication, mutual respect, and non-discrimination. We view the diversity that students bring to this class as a resource, strength and benefit. It is our intent to present materials and activities that are respectful of diversity: gender, sexuality, disability, generational status, socioeconomic status, ethnicity, race, religious background, and immigration status. Any suggestions for promoting a positive and open environment will be appreciated and given serious consideration.

Academic integrity-

From the College **Academic Integrity & Student Conduct** policy:

All members of the University of Chicago belong to a tradition dedicated to the pursuit and cultivation of learning. A few simple principles - academic honesty, mutual respect and civility, personal responsibility lie at the heart of our intellectual community. Each of us - students, faculty and staff - is pledged to live up to these standards and to support each others' efforts in this regard. We take these values seriously...

And the **Academic Honesty and Plagiarism** policy:

It is contrary to justice, academic integrity, and to the spirit of intellectual inquiry to submit another's statements or ideas of work as one's own. To do so is plagiarism or cheating, offenses punishable under the University's disciplinary system. Because these offenses undercut the distinctive moral and intellectual character of the University, we take them very seriously.

Proper acknowledgment of another's ideas, whether by direct quotation or paraphrase, is expected. In particular, if any written or electronic source is consulted and material is used from that source, directly or indirectly, the source should be identified by author, title, and page number, or by website and date accessed. Any doubts about what constitutes "use" should be addressed to the instructor.

Student interactions are an important and useful means to mastery of the material. We recommend that you discuss the material in this class with other students; that includes the practice exercises and homework assignments.

So what is the boundary between acceptable collaboration and academic misconduct?

For practice exercises, there are no restrictions. By design, you will work in groups, so you can even send code files to each other if you choose. (Though keep in mind the importance of typing up and understanding the exercises on your own.)

While it is acceptable to discuss homework, it is not

acceptable to turn in someone else's work as your own. When the time comes to write down your answer, you should write it down yourself, from your own memory. **You should not be sending homework code files back and forth.**

Moreover, **you should cite any material discussions or written sources in your code files**, for example:

II I discussed the computation of the polygons in this
II exercise with `#{NAME}`.

II

II `#{NAME}` helped me debug issues I was having drawing
II super-rectangles over Zoom screen share.

II

II I also found code from `#{URL}` that performed some
II visual effect, and I adapted it to...

For student collaborations, it can be a slippery slope that leads from sanctioned collaboration to outright misconduct. But for all the slipperiness, there is a clear line: present only your ideas as yours, and attribute all others.

If you have any questions about what is or is not proper academic conduct, please ask us.

Sexual misconduct

Our school is committed to fostering a safe, productive learning environment. **Title IX and our school policy** prohibits discrimination on the basis of sex. Sexual misconduct - including harassment, domestic and dating violence, sexual assault, and stalking - is also prohibited at our school.

Our school encourages anyone experiencing sexual misconduct to talk to someone about what happened, so they can get the support they need and our school can respond appropriately.

If you wish to speak confidentially about an incident of sexual misconduct, want more information about filing a report, or have questions about school policies and procedures, please contact our **Title IX Coordinator**, which can be found on our school's website.

Our school is legally obligated to investigate reports of sexual misconduct, and therefore it cannot guarantee the confidentiality of a report, but it will consider a request for confidentiality and respect it to the extent possible.

As a teacher, I am also required by our school to report incidents of sexual misconduct and thus cannot guarantee confidentiality. I must provide our Title IX coordinator with relevant details such as the names of those involved in the incident.

Mandatory reporting of child abuse or neglect

The instructor and staff for the Creative Coding course are mandated reporters and are required to report suspected child abuse or neglect to the Illinois Department of Child and Family Services. For more information, please see [this University policy](#).