# CART 253: Creative Computation I – Fall 2020 – 3 credits

## When?

8 September – 7 December, 2020
Section A: Thursdays, 13:30 – 17:30
Section B: Tuesdays, 13:30 – 17:30

## Where?

The internet!

## Who?

Pippin Barr
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## Office hours

tbd.

## TAs

tbd.

## Territorial acknowledgment

We acknowledge that Concordia University is located on unceded Indigenous lands. The Kanien'kehá:ka Nation is recognized as the custodians of the lands and waters on which we gather today. Tiohtiá:ke/Montreal is historically known as a gathering place for many First Nations. Today, it is home to a diverse population of Indigenous and other peoples. We respect the continued connections with the

past, present and future in our ongoing relationships with Indigenous and other peoples within the Montreal community.

(See also: https://www.concordia.ca/about/indigenous/territorial-acknowledgement.html)

## Description

Learning to program is at the heart of understanding computation. In this course we cover an introduction to the key elements of programming, all while emphasizing experimental and playful approaches to software aesthetics. Students will spend time both learning the basics of how to program while also producing their own original work in a studio environment.

## Learning Objectives

After completing this course, students should be able to:

- Read, understand and write JavaScript
- Comfortably use the arts-oriented library p5 to make digital art
- Use programming to explore and express their ideas

## Key activities

### Lectures

Each week will include a number of lecture videos and notes made by the instructor covering a specific topic in programming for students to follow in their own time before that week's class time.

### Activities

Each week will include a short programming activity covering the topic of the week. Students will complete the activity themselves alongside a video of the instructor doing the same work.

### Class structure

Class time will be divided into a "start of class" period beginning at the start of the class during which all students will attend a group voice and text chat on Discord with the instructor for Q&A about course material and the exercises/activities/projects. See the Class Structure page for more information.

Attendance of the start of class period is required and students are ideally expected to contact the instructor ahead of time with questions of interest or examples they would like to see covered during this discussion.

After the start of class period, there will be studio time during which the instructor and TA will be available for specific student requests for assistance via the Discord. Attendance for this period is not mandatory but is very strongly encouraged.

### Exercises

Most weeks will include an evaluated programming exercise for students to demonstrate mastery of the topic(s) covered that week.

### Projects

There will be two graded projects during the course. Each will be used as an opportunity for students to practice and develop their programming skills with room to express their own ideas.

### Office hours

The instructor will be live on Discord for further hours during the week explicitly to support students with questions about programming topics, activities, exercises, and projects.

## Expected skills

Students are *not* expected to have any programming experience. However, students are expected to have the desire and willingness to learn and push themselves to learn programming, and to engage deeply with thinking about creating interactive digital media through code.

## Moodle

Moodle will be used to host lecture videos as well as to submit assignments and to receive grades for them.

## GitHub

GitHub be used for all other course content. The course GitHub repository will contain example code, lecture notes, course information, and more. Students will be able to post questions and issues with GitHub's issue tracker as needed.

Students will create their own repository on GitHub to save, track, and present their coursework. (Actual submission will be via Moodle, for privacy.)

## Discord

Discord will be used as our common space for this course. It will include general channels for everyone to hang out and chat, as well as channels for class time and "offices" for the instructor and the TAs. You will need to use your real name as your nickname on the Discord.

## Evaluation

Specific evaluation requirements will be provided when assigned.

- Weekly exercises (10%)
- 8 exercises worth 1.25% each
- Projects (65%)
- Project 1 (20%)
- Project 2 (45%)
  - Proposal (10%)
  - Project (35%)
- Participation (25%)
- Participation includes attending class, completing coursework, being present on the Discord, asking questions, contributing to discussions, sharing ideas, and coming to office hours (even if it's just to show off your work!)

## French

Students have the right to write in French at Concordia. Pippin can read French relatively well, but cannot offer substantive feedback on writing skill itself. Given that this is a programming course, you are welcome to name variables and functions in French as well as to write comments in French.

## Policy

- Late work of any kind will lose one letter grade per day late, beginning immediately after the deadline (e.g. if it is two days late, work that would have received a B would lose two letter grades and receive a C+)
- Concordia University has an Academic Integrity Policy which must be followed.

## Costs

- See the Department Syllabus for Department-specific costs such as the Department fee and CDA fee. In brief, however, Department and CDA fees have been waived for the Fall 2020 semester.
- All software students are expected to use in the class will be free.

## Technology

The practical work done in this class will take place on your own computer, with course software installed on it by you. The instructor is significantly more experienced with macOS, but will work to support Windows and even Linux as needed. This course does not require a significantly powerful machine beyond the ability to run a web browser.

## Course Schedule

(Click through for week-by-week information about what we will cover in the course.)

## Design and Computation Arts Syllabus

(Click through for the standardized information from D/CART that is included as part of all course outlines.)

## Behaviour

All individuals participating in courses are expected to be professional and constructive throughout the course, including in their communications. Concordia students are subject to the Code of Rights and Responsibilities which applies both when students are physically and virtually engaged in any University activity, including classes, seminars, meetings, etc. Students engaged in University activities must respect this Code when engaging with any members

of the Concordia community, including faculty, staff, and students, whether such interactions are verbal or in writing, face to face or online/virtual. Failing to comply with the Code may result in charges and sanctions, as outlined in the Code.

## IP

Content belonging to instructors shared in online courses, including, but not limited to, online lectures, course notes, and video recordings of classes remain the intellectual property of the faculty member. It may not be distributed, published or broadcast, in whole or in part, without the express permission of the faculty member. Students are also forbidden to use their own means of recording any elements of an online class or lecture without express permission of the instructor. Any unauthorized sharing of course content may constitute a breach of the Academic Code of Conduct and/or the Code of Rights and Responsibilities. As specified in the Policy on Intellectual Property, the University does not claim any ownership of or interest in any student IP. All university members retain copyright over their work.

## Extraordinary Circumstance

In the event of extraordinary circumstances and pursuant to the Academic Regulations, the University may modify the delivery, content, structure, forum, location and/or evaluation scheme. In the event of such extraordinary circumstances, students will be informed of the changes.

## Ethical Behaviour

The most common offense under the Academic Code of Conduct is plagiarism, which the Code defines as "the presentation of the work of another person as one's own or without proper acknowledgement." This includes material copied word for word from books, journals, Internet sites, professor's course notes, etc. It refers to material that is paraphrased but closely resembles the original source. It also includes for example the work of a fellow student, an answer on a quiz, data for a lab report, a paper or assignment completed by another student. It might be a paper purchased from any source. Plagiarism does not refer to words alone –it can refer to copying images, graphs, tables and ideas. "Presentation" is not limited to written work. It includes oral presentations, computer assignments and artistic works. Finally, if you translate the work of another person into any other language and do not cite the source, this is also plagiarism.

**In Simple Words:** Do not copy, paraphrase or translate anything from anywhere without saying where you obtained it. (Source: The Academic Integrity Website: https://www.concordia.ca/students/academic-integrity)