

# CSC 108 Optional Final Project

## Due: December 14, 2023 by 1:00PM on D2L

Choose a topic that we are not covering in class and make a brief (6-8 minute) presentation using [ScreenPal](#) or another screen capture tool. *This project will be done entirely via a screen capture video; we will not be meeting in person during the final exam period.* You will need to present Processing code and explain, in detail, how and why it works.

This project is worth 25 points and replaces your lowest quiz or programming assignment grade. If you are in a position where you would benefit more from replacing your lowest lab score, your grade on the final project will be scaled to match whatever your lowest lab was worth. (For example, if you earn a 20/25 [80%] on the final project and want that score to replace Lab 2, which was worth 14 points, your Lab 2 grade would end up being  $80\% * 14 = 11.2/14$ .)

You should select a topic that is appropriate for your experience level. You may ask clarifying questions about your topic, but I will not give you a step-by-step, detailed explanation. It is up to you to become well acquainted with it so that you can make a presentation that could be used for teaching the concept.

Your presentation should include sample code that you can run and explain.

You must have your topic approved by **Tuesday, December 5**. This is an individual project, and each project must be on a different topic. Topics will be approved on a first-come, first-served basis.

### Project Suggestions (you are more than welcome to come up with your own topic idea)

From our course textbook:

- Examples 5-8 and 5-9, easing
- Examples 6-1 and 6-2, translation
- Examples 6-3 and 6-4, rotation
- Example 8-6, tweening
- Examples 8-12 and 8-13, sine wave values and movement

From *Learning Processing, 2<sup>nd</sup> Edition* by Daniel Shiffman (available through O'Reilly Learning)

- Example 6-3, while loops
- Examples 6-4 and 6-5, infinite loops
- Example 15-3, my very first image processing filter
- Exercises 17-1 and 17-2, printing strings
- Example 17-1, simple displaying text

From *Coding Art* by Yu Zhang and Mathias Funk (available through O'Reilly Learning)

- Figure 2-3 (3D canvas with directional light)
- 3.1.1 first two examples (randomly generate dots)

There are many more examples at <https://processing.org/examples>