

### CS 450/550 -- Fall Quarter 2020

## **Project #1**

50 Points

**Due: October 5** 

# **Draw Something Cool in 3D!**

This page was last updated: July 26, 2020

#### Introduction

This project requires you to draw something fun in 3D. It must be of your own creation. You can use pre-canned 3D objects, such as the ones that GLUT provides, in *addition* to your own, but you must also create your own geometry.

You must have at least **100 x-y-z coordinates**. These can be divided up among multiple of your objects.

Note that you don't need to type in the 100 x-y-z's yourself. You are welcome (recommended!) to generate most or all of them procedurally.

This must be your own object(s). Reading geometry in from a file doesn't count.

You must use at least 5 different colors.

The 3D rotation and scaling from the sample program must still be working.

#### Turn-in:

Use the Teach system to turn in your:

- 1. Your .cpp file
- A one-page PDF with a title, your name, your email address, a nice screen shot from your program, and the link to the <u>Kaltura video</u> demonstrating that your project does what the requirements ask for. Narrate your video so that you can tell us what it is doing.

Be sure that your video is flagged unlisted.

### **Bonus Days:**

Each of you has been granted five total Bonus Days, which are no-questions-asked one-day project extensions, but no more than **2** Bonus Days may be applied to any one project. Hint: Bonus Days will likely be worth a lot more to you late in the quarter than they are worth to you early in the quarter!

## **Grading:**

Feature	<b>Points</b>
At least 100 vertices	20
At least 5 colors	20
3D rotation and scaling	10
Potential Total	50