Within this assignment, you will be using 3D Modeling Software to generate your 3D Print Files. This process can be applied to any form of modeling whether it be Architectural or a simple desk organizer. For this assignment use Rhino/Sketchup/Fusion360/Revit to make your model.

Assignment Objectives
- To learn and understand modeling techniques that will allow you to bring your designs from a computer to reality.

Final Deliverable:
-One .STL or .OBJ
-One screenshot of a model in the software

Instructions

1. Select an appropriate 3D Modeling Software, Revit/Rhino/Sketchup/Fusion360 are all options. Sketchup and Fusion360 are free for at least 30 days. Also, Rhino is available for free in the Architecture Library with student login.

2. If in Rhino, download our CAP Fab Lab scaling file from our website, this will be useful for testing scale in the future. Please size your model to fit within a 4" x 4" x 4" cube regardless of the software chosen.

3. When generating your model. Please keep in mind, the CAP Fab Lab guidelines require that your model should be
   -Water Tight (Closed)
    -Avoid thin walls or pipes
    -Avoid large 90-degree overhangs (45 degrees or less can be printed without supports)
    -Scaled to fit within a 4" cube
If you have any other concerns, please refer to the 3D Printing Guidelines on the CAP Fab Lab website.
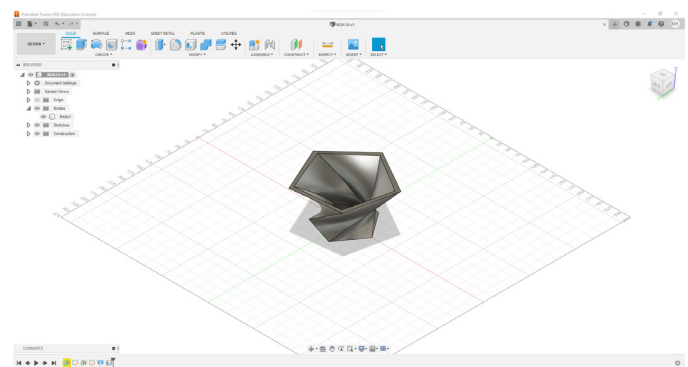
4. Export as an .STL or .OBJ and then select Binary (if asked). Once completed, take a screenshot of your model in the software you selected.

Link to Scaling File/Guidelines
https://sites.bsu.edu/capfablab/fdm-3d-print-request/
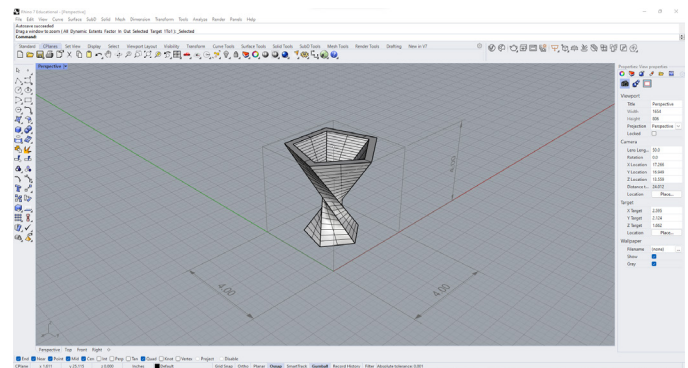
Rhino Model Example

Fusion 360 Example