

Ringwood 3D

To print a 3D design:

1. Work up a design using any number of CAD programs available online.
2. Save your design as a STL file and bring it to the library on a USB memory drive or Micro SD card.
3. Library staff will use software to convert your file to code that our printer can read (called G Code.) We'll call or email you with an estimated cost of the print job.

TinkerCAD
SketchUp
Blender

Glossary of terms:

CAD = Computer Aided Design

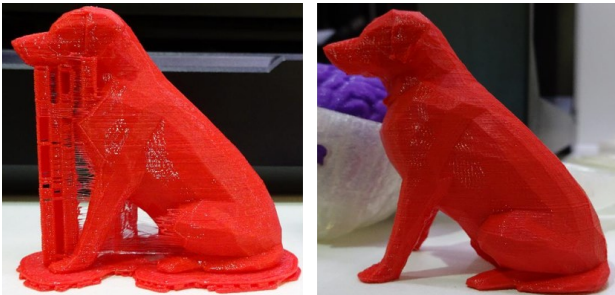
STL = File Extension for a 3D design. Short for *stereolithography*, which refers to a type of 3D printing that involves material being laid down layer by layer.

G Code = a programming language that tells computerized machine tools how to make something

PLA = Polylactic Acid, a biodegradable thermoplastic. Type of plastic used in our 3D printer. Good for rapid printing, but prone to being brittle.

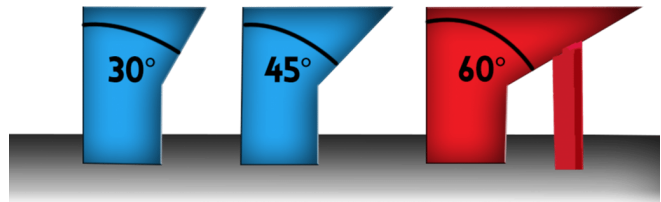
Tips for creating 3D designs for optimal printing:

Make as few overhangs as possible. An overhang is any area that is suspended over empty space and requires supports that need to be removed after printing that may cause breakage.



In the left picture, the dog has printed with support structures for the overhanging parts of the object. The supports have been removed in the right-hand picture.

The blue objects with overhangs at smaller angles may not require support while the red one will.



When using text in your design, be mindful that letters that are not attached to the main object will print as separate objects. Letters will print better if they are connected to one another side-by-side and are on top of a platform. Letters attached to and laying on the face of an object will print best.

The white letters below were overhanging and printed without supports, resulting in “stringing.”



The red letters are laying on their backs on a platform . They printed well.