

RIDGEWOOD PUBLIC LIBRARY

3D PRINTING SERVICES

The Ridgewood Library continues to offer access to new and emerging technologies to our community, providing opportunities for Ridgewood patrons to expand their creative potential and skills. The latest example of this is the Library's 3D printer, which converts a digital 3D computer design to real 3D objects in a non-toxic biodegradable plastic called PLA. This policy covers the use of this new tool so all can share it safely and fairly.

3D printer Policy and Restrictions

- I. The Library's 3D printer cannot be used unlawful purposes, and cannot create any materials which are:
 - a. Prohibited by local, state or federal law.
 - b. Unsafe, harmful, dangerous or posing a threat (e.g. no weapons or realistic models of weapons).
 - c. Obscene or otherwise inappropriate models, this technology is in a room where classes for both adults and children are taught.
 - d. Models that violate copyright or patent rights, just like our 2D paper printers.
- II. Again just like paper printing the Library reserves the right to refuse any 3D print request.
- III. Because this new technology can be delicate, only trained Library Staff and select Maker Volunteers will operate the 3D printer. Patrons can create designs to be sent to the 3D printer by staff and the resulting 3D objects kept for pick up.
- IV. This new policy governing the use of the new 3D equipment is subject to change.

To Create a 3D Design:

1. The computers in the Library's Habernickel Technology Training Center have been loaded with free and open-source design software, including:
 - a. Google Sketchup
 - b. Autodesk 123D Design
 - c. TinkerCad
 - d. Blender
 - e. Sculptris
 - f. OpenSCAD
 - g. Meshmixer
 - h. netfabb
 - i. MakerWare

All of these programs are freely downloadable to your own computer to practice or make your own designs

2. Training Center computers with design software can be used only during scheduled 3D Design Classes/Labs or by appointment.

3. Many 3D drafting programs may be used to create a design, as long as the file can be saved in .stl, .obj, or .thing file format and the design is 'manifold' (no holes or voids preventing printing).
4. Designs created by other people who have decided to share them are available online. One popular site is www.thingiverse.com with thousands of designs to view and learn from, there are other sites as well. Most though not all of these designs are free to view, download and modify.

How To Print your 3D Design:

1. Bring in your file or email it to: cgallo@ridgewoodlibrary.org
(Please make sure your file is saved in: **.stl** (preferred), **.obj**, or **.thing** file format.) You may also select your print color at this time (*see options below).
2. The Library reviews all submitted designs before printing to try to eliminate printing problems and to enforce printing policies.
3. Wait/pickup time: Please allow minimum of 24 hours from file submission we will notify you by phone or email. Finished items will be held for pickup at the Reference Desk.
4. The Library may limit or refuse files at any time, based on size, required print time, the number of printing requests already in the queue or other reasons.

**Available Colors: Black, White, Gray, Natural (undyed), Red, Orange, Yellow, Green, Neon Green, Blue, Purple, Pink, Photochromatic Blue/Red (changes color in sunlight), Glow-in-the-Dark, and Peach)*

3D Printing Fee

\$0.20 per gram of filament (plastic) used

\$0.25 per gram of specialty filament (*Photochromatic Blue/Red and Glow-in-the-Dark*)

For questions, please contact:

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