



Guide to 3D Printing

General Info:

- 3D printers are the must-have accessory for library makerspaces nationwide. 3D printing enables designers to build custom objects that would otherwise only exist in their imagination. In the past, patrons have printed toys, key fobs, cookie cutters, and more.
- Our Printers are Flashforge Inventor 2s, and have a print volume of 5.9 x 5.51 x 5.5". We print using 1.75 mm PLA filament, which is biodegradable, making it safe to use indoors.
- Use of ZBPL's 3D printers is open to the public by appointment, pending the availability of Sandbox Staff. Any patron wishing to print should contact Maggie at mdaab@zblibrary.org to make an appointment.

Cost:

- Cost is determined by the time it takes for the print to be completed. Our rate is \$0.25 per 15 minute increment.

Rules:

- Prior to your appointment, you must have your file prepared in a .STL or .OBJ format.
 - We recommend that you send your file via email prior to coming in, to confirm that we are able to print it.
 - If you are unable to send your file digitally, please bring it with you on a USB flash drive.
- The Sandbox staff reserves the right to deny any print request if the print job...
 - ...Requires too much time to print. This is left up to the makerspace staff's discretion.
 - ...Is obscene or otherwise inappropriate content. This includes 3D printed weapons and weapon replicas.
 - ...Is in clear violation of copyright or intellectual property laws. If a patron obtains their design from an online source, they are responsible for determining whether the file has a creative commons license and is available for free distribution.

Tips For Choosing Your File:

- The 3D printer can print files that have been designed by the patron using a CAD (computer assisted drawing) format.
- Any 3D design software can be used by the patron to design files as long as the file is saved in a .stl or .obj file format. (If you have never designed before, Tinkercad.com is a great place to start!)
- Digital designs also are available from various file-sharing databases such as Thingiverse.com.

Please note that procedures governing the use of the Library's 3D printers are subject to change.