

**Lied Public Library Policy**

Section: Collections, Computers and Technology

Subject: 3D Printer &amp; Cricut

**Board**

Approved: 06-2016

Reviewed:

Revised:

## 3D Printing & Cricut

The library maintains a Taz 5 3D printer and Cricut Explore Air for use by the public in the library. Patrons must read and sign our policy agreement below before using the printer to print a model.

### What is 3D Printing & Cricut?

3D printing works by feeding plastic filament into a heated print head. The print head melts and extrudes a very thin layer of plastic filament onto a printing surface and then extrudes another layer on top of that. Layers of plastic are built on top of each other over and over, sometimes hundreds of times, until you have your finished model.

Cricut is an electronic cutting machine for DIY projects and crafts. It precisely cuts a wide variety of materials from paper to iron-on to adhesive vinyl—even thick materials like leather and burlap.

### Where do the designs come from?

Our printer uses the .stl file format for 3D models. You can download model files from popular 3D communities such as [Thingiverse](#) and others or you can create a model yourself from scratch with free programs like [Tinkercad](#) and [SketchUp](#).

Our Cricut cutter uses files from [Cricut's Design Space](#) website and you can create your own.

### How long does it take to print?

It depends. Models just a few inches high can have hundreds of layers and can take hours to build. More intricate models/designs may take longer to print/cut but may not take more filament. Cura software used for rendering .stl files gives estimated 3D print times.

### How much does it cost?

3D Model cost depends on its printed weight not finished weight. Printed weight may include rafts and supports necessary to print your model correctly but are removed when your print is finished. Your printed weight will be more than your models finished weight. Models will cost 10¢ a gram. The library may require a \$2.00 deposit prior to printing, any amount left over after printing will be returned to the users. You can find out your models weight by loading the file in Cura. You can download Cura at <https://www.lulzbot.com/cura>.

There is no cost to use the Cricut Cutting machines; however, you must provide your own supplies.

**Lied Public Library Policy****Section: Collections, Computers and Technology****Subject: 3D Printer & Cricut****Board****Approved: 06-2016****Reviewed:****Revised:****Library 3-D Printer/Cutter Use Policy**

The library maintains a Taz 5 Printer and Cricut Explore Air Cutter for use by the public. Patrons must sign a copy of this agreement in person. Copies are available at the Desk.

**Policy:**

Use of the 3-D Printer/Cutter is at the discretion of library staff. The library reserves the right to deny use of the equipment. The 3-D Printer/Cutter may only be used by library cardholders.

It is expressly prohibited:

- To print/cut any object that is intended to physically harm, or attempt to harm, a person or animal in any way.
- To print/cut obscene or inappropriate materials.
- To print/cut any object that violates or infringes upon a patent, trademark, or other proprietary right. Use of the 3-D Printer/Cutter and associated equipment shall follow all legal guidelines. U.S. Copyright Law governs the making of photocopies or other reproductions of copyrighted material.

The library will not be liable for functional failure of, injuries, or property damage caused by objects or materials made through the use of the 3-D Printer/Cutter. The library strongly recommends that the 3-D Printer/Cutter not be used to make things that could prove harmful or that would result in significant cost to the user if they fail.

The library does not guarantee a successful print. Unless the print fails to finish, the cost of the completed print, regardless of quality, will still be charged.

Typically your model will be printed within 72 hours. However long print queues and breakdowns do happen and therefore we cannot guarantee completion times.

If a print fails, it may be attempted only two more times.

Items that are not picked up after one week (7 days) will become property of the Lied Public Library.

Items must be picked up by the individual who printed them.

A charge in the amount of the print's cost will be added to the patron's record for any unclaimed items.

Only designated library staff and trained patrons will have access to the 3-D printer.

The library is not responsible for the subsequent safety of any item made with the 3-D printer.

Signature: \_\_\_\_\_ Printed Name: \_\_\_\_\_

Date: \_\_\_\_\_ Email: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Filament Color: Black – Red – Green – White – Clear – No Preference

Deposit Paid: \_\_\_\_\_ File Name: \_\_\_\_\_

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Patrons must design, scan image, create or download their own models for use on the 3-D Printer; library staff are available for **assistance only**.

The maximum printed area must be smaller than 11.7in x 10.8in x 9.8in.

Files must be in **.stl** file format. Files can be dropped off on a USB flash drive at the desk.

Cost: The library currently charges 10 cents per gram of PLA plastic.

The library reserves the right to schedule only one print per week per person or entity.

The library uses only PLA filament at this time and colors may be limited.

Print times are estimated; we cannot guarantee print times.

The library will render all files in Cura software before printing. Patrons may preview the file in Cura themselves by downloading the free software from the following website: <https://www.lulzbot.com/cura> Patrons should bring in non-rendered .stl files to print.

Patrons can submit 3D models to print by emailing them to the library.