

3D Printing FAQ/ Procedures

How does 3D printing at the Highland Library work?

[Complete a request form online](#) through Google Forms, or fill out a paper copy in the library. Submit your file to the library and we will print out your object on our Lulzbot Mini 2 3D printer. There is a printing fee of \$0.15/gram. Please refer to the chart on the next page for an estimate of cost.

Specifics?

1. Submit your file (use .STL or .OBJ file formats) to the library by emailing the file or link to: highlandlibrary3d@gmail.com, or bring your file in to the Adult Reference Desk on a USB drive.
2. Fill out the request form online or fill out a paper copy in the library.
3. Highland Library staff will review your file.
4. You will receive a response (usually within 72 hours*) with an estimate of time, size, and cost of your print.
5. Pay at the library the estimate for material to be used via cash or check at the Front Desk.
6. Highland Library will print your object and let you know by phone or email when it is ready for pickup. Pick up items from the Adult Reference Desk inside the library during regular business hours.
7. Items not picked up within 4 weeks will become the property of the library.

What materials and colors are available?

The library's 3D printer uses PLA plastic filament in a range of colors:

You can choose from: Red, blue, orange, gold, black, grey, white.

Objects can be printed in only one color as the printer only holds one spool /cartridge of filament at a time.

Are there any limits to what I can have printed?

Please review the [3D Printing Policy](#).

Files submitted will be reviewed before printing.

Print area is: 160mm x 160mm x 180mm (6.2 inches wide x 6.2 inches long x 7 inches high). This is the limit to the size of your printed object.

We limit print jobs to 8 hours print time.

If there is a problem with your file, Library staff will communicate how best to proceed (by adjusting size, infill, or layout).

How long does it take to print an object?

This depends on several factors including the size of your file, the resolution desired and whether or not it will need supports to print. A cell phone case may take less than an hour to print, an object the size of a Rubik's Cube may take about five hours to print. Our sample octopus took 1 hour to print.

More Information

Use of the 3D printer will be provided on a first come first serve basis and printing is limited to library open hours.

Individuals may submit only one file at a time for printing. However, if time permits and no is waiting to use the printer, Library staff, at their discretion, may permit an individual to submit more than one file for printing.

Files containing more than one object are permitted.

The Highland Library is responsible for mechanical equipment failure and will reprint an object at no additional charge whenever possible should failure occur.

Patrons will not receive a replacement job if dissatisfied with color, scale, quality, design or other options within the patron’s control or that are part of the print request.

Reprints of additional copies of items must be requested within ten days of email notification, otherwise a new 3D Printer Request Form and file will need to be submitted. The Library will not automatically save print request files.

3D Printing Fee by Weight (in grams) – rounded up to nearest gram							
1	\$0.15		10	\$1.50		100	\$15.00
2	\$0.30		20	\$3.00		200	\$30.00
3	\$0.45		30	\$4.50		300	\$45.00
4	\$0.60		40	\$6.00		<p>PRINT TIME: Printing up to 5 hours: No additional fee</p> <p>If print job goes over 5 hours, pay additional \$1/ hour</p>	
5	\$0.15		50	\$7.50			
6	\$0.75		60	\$9.00			
7	\$0.90		70	\$10.50			
8	\$1.20		80	\$12.00			
9	\$1.35		90	\$13.50			
10	\$1.50		100	\$15.00			