

Dunedin Library 3D Printing Guidelines and Frequently Asked Questions

What is 3D printing?	3D printing is a technology that creates physical objects from digital designs. 3D printing is sometimes referred to by the terms “additive manufacturing” or “rapid prototyping.” That means the machine creates objects by slowly layering a specialized plastic.
Why does the library have a 3D printer?	The Dunedin Library is committed to supporting interest and education in technology and the skills needed to succeed in the 21 st century. The 3D printer allows the library to support STEM programming, and the development of technology skills, in a free, equal-access environment.
Who can use the 3D printer?	The Library’s 3D printer is available for use by the general public.
What is the cost?	The charge is \$0.05 per gram.
What are the requirements for using the 3D printer?	There are no formal requirements for individuals wishing to print their designs; however, only trained staff and volunteers may handle the 3D printer.
When can the 3D printer be used?	The 3D printer operates only during regular Library hours. The maximum print job is 5 hours. If your print job will take longer than 5 hours, it must be submitted in separate pieces.
What can be printed at the Library?	<p>The Dunedin Library does have some restrictions on what can be printed. The following designs and objects will not be accepted:</p> <ul style="list-style-type: none"> • Any item prohibited by local, state, or federal law. • Any item that is determined to be unsafe, harmful, or dangerous or poses a threat to the well-being of others. • Any item judged to be obscene or inappropriate for the Library environment. <p>The Dunedin Library reserves the right to refuse any 3D printing requests.</p>
Copyright Disclosure	The user is responsible for ensuring all designs are within compliance of all copyright and property laws. The printer may not be used to reproduce material that is subject to copyright, patent, or trademark protections.
Liability Disclosure	The user assumes all liability for 3D printed items and designs.
How can I print something on the 3D printer?	<p>There are two main ways to submit a design to be printed:</p> <ul style="list-style-type: none"> • You can choose a design from a file-sharing website such as www.Thingiverse.com or www.youmagine.com . • You can create your own design using computer aided design (CAD) software.
What software programs are best to use?	There are a variety of software programs that can be used create your own 3D design. The Library recommends the following programs:

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	<ul style="list-style-type: none"> • Tinkercad – Tinkercad is an online-based software designed for children and beginning designers. It can be accessed for free at www.tinkercad.com • 123D Design – 123D Design is a free CAD software that can be downloaded onto Macs, PCs, and iPads. http://www.123dapp.com/design • Google Sketch – One of the easiest, fastest softwares on the market, Google Sketch is an online-based, free program. Google Sketch also has a large database of free files and designs that can be downloaded at http://www.sketchup.com/ • Cura – Cura is the preferred CAD software for the Ultimaker 2. It is available, by appointment, at the Library, or to download for free at https://software.ultimaker.com/. 		
<p>How big can I make my design?</p>	<p>This 3 D printer is limited to the following dimensions: 25.2 L x 19.9 W x 15.0 H cm [9.9 x 7.8 x 5.9 in] 7,522 cubic centimeters [456 cubic inches] If you want to build something larger, it should be designed in multiple parts that can be assembled once the printing is complete.</p>		
<p>What colors can I print?</p>	<p style="text-align: center;">We currently have the following colors available:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <ul style="list-style-type: none"> • Beige • Black • Blue • Gray • Green </td> <td style="width: 50%; vertical-align: top;"> <ul style="list-style-type: none"> • Orange • Purple • Red • White • Yellow </td> </tr> </table>	<ul style="list-style-type: none"> • Beige • Black • Blue • Gray • Green 	<ul style="list-style-type: none"> • Orange • Purple • Red • White • Yellow
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<p>What type of files can be submitted?</p>	<p>Designs must be submitted in .stl file format.</p>		
<p>How do I submit my design?</p>	<p>Individuals wishing to submit their 3D designs in the appropriate file format should fill out a 3D Printing Request Form. The form can be found on the Dunedin Public Library's website at Dunedingov.com/library/makery. An .stl file must then be submitted via the email address provided upon completing the online form.</p>		
<p>How many items can I print at a time?</p>	<p>One print job may be submitted at a time per user. No further jobs will be added to the queue for that user until they pick up and pay for their print job. This includes jobs that require to be printed in several pieces.</p>		
<p>How long will it take to print my design?</p>	<p>Print times vary based on size, complexity of design, and current printing queues; you do not need to be present during the printing process. Please be aware that the printer may be unavailable due to maintenance, heavy usage periods, or scheduled programming. It is the user's responsibility to submit designs far enough in</p>		

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	<p>advance. Print jobs may take up to four weeks. More complex or lengthy jobs may drop in queue position in order to ensure printing time is utilized efficiently.</p>
How will I know when I can pick up my item?	<p>The Dunedin Library will contact you when your 3D printed item is available. Items must be picked up within 7 days of the contact date.</p>
What if my item doesn't work/fails/looks bad/etc....?	<p>The user assumes all responsibility for the 3D design. The quality of the resulting print is the sole responsibility of the user. Failed prints due to 3D design should be reworked and resubmitted by the user. Failed prints due to machine malfunction or failure will be reprinted at the earliest convenience by staff, without a resubmission by the user.</p>

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Dunedin Library 3D Printing Request Form

Last Name:	
First Name:	
Library Card #:	
Phone Number:	
Email Address:	
Estimated Size: (Please include height, length, and width, in or mm)	
Filament Color: (Please only choose one color)	<input type="checkbox"/> Red <input type="checkbox"/> Blue <input type="checkbox"/> Yellow <input type="checkbox"/> Pink <input type="checkbox"/> Black <input type="checkbox"/> Silver
Item Description:	
Additional Notes:	
File Name:	

For Librarian use only:

Date Received:	
Date Completed:	
Contact Date:	