

Port Chester Rye-Brook Public Library

Guidelines for 3D Printing

Patrons

The Port Chester Rye-Brook Public Library 3D Printer is intended for use by patrons 14 years of age and older. Any patron interested in using the 3D printer is required to have read and understood the following information very carefully and must sign it.

What is 3D Printing and how does it work?

3D printing is the process of making a physical object from a digital model, also known as additive manufacturing. It begins with a digital design on file using a 3D modeling program. It uses a file from a computer aided design (CAD) file that is created with a 3D modeling program from scratch. This can be done with programs such as Google Sketch Up, Blender etc., and or/ a 3D scanner/digitizer. Once the digital model is created, it is saved as a .STL file. This .STL file is then opened up on the MakerBot Desktop software where it can be exported to a USB drive and then printed on the 3D printer. The PLA filament is fed through an extruder (nozzle) which is heated and pushes out filament. The 3D printer prints an object by building it layer by successive layer, until the entire object is complete.

Requirements

A patron must have completed a training session at the Port Chester Rye-Brook Public Library (other trainings on 3D printing will not be honored). The 3D printer can only be used when a trained staff member is scheduled. Printing hours are subject to change depending on staff availability and/or weather conditions. The 3D printer can only be used if an appointment is made in person or over the phone. You must be 14 years or older to use the 3D printer. If under 14 years old, you must have a parent/guardian accompany you.

****The Port Chester-Rye Brook Public Library has the right to approve or reject any 3D printed project****

Safety

Some parts of the machine such as the nozzle get very hot (215°C/419°F). Please do not touch the nozzle or the build plate while the machine is in progress. Doing so can result in serious burn and/or injury. After the item is finished printing, a staff member will help remove the object from the build plate. You do not have to be present during the entire printing session since some projects take longer than others. We do suggest that you check up on your item as errors can occur. If an error occurs, we cannot guarantee that you will be able to print again that same day. You may have to reschedule your print. This is left to the discretion of the 3D printing staff.

Costs

Costs will be based on the amount of material used to print. For every gram of PLA filament used there will be a \$0.25 charge.

Port Chester Rye-Brook Public Library

Guidelines for 3D Printing

Reservations:

Port Chester-Rye Brook Public Library patrons will receive preference over non-library patrons. Reservations will be taken over the phone or in person at the information desk. Patrons will be given a maximum of a 2 hour time slot to print out a project. This includes preparation time. If your project exceeds 2 hours, depending on availability, you may book another appointment to use the printer. There may be time restraint on completion of a project depending on how complicated it may be.

How often may I print?

You may print once a month during our initial introduction of the machine. If you would like to print more often, you may sign-up for a cancellation waiting list. If there is a cancellation or an unfilled slot we will contact you.

Websites or programs for 3D printing

Many objects are already created and can be downloaded to a USB flash drive from www.thingiverse.com. MakerBot Thingiverse is a thriving design community for discovering, making and sharing 3D printable things. Innovators familiar with Maya, Sketchup, Blender, Solid Works, etc., can create projects and save them as .STL files and import them on MakerBot Desktop software.

I agree to abide by the Port Chester-Rye Brook Public Library's 3D printer policy. My signature below recognizes that I have read all of the above items. I understand that my noncompliance with any of the above items will result in my banishment from using the printer permanently or at our discretion.

Name

Signature

Address

E-mail Address

Telephone #

Date

Staff Member Signature _____