

**Katonah Village Library**

**Guidelines for 3D Printing**

**Patrons**

The Katonah Village Library 3D Printer is intended for use by patrons 12 years of age and older or accompanied by an adult. 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 design. It begins with a digital design created using a 3D modeling program. This can be done with programs such as SketchUp, Blender, etc., and/or a 3D scanner/digitizer. Designs others have made can be downloaded from the internet from sites such as thingiverse.com. Once the digital design is created, it is saved as a .STL file. This .STL file is then opened up in a program called MakerBot Desktop, where it can be sent to the 3D printer to print.

Plastic filament is fed through an extruder, which is like a motorized hot glue gun, heating and squirting out plastic into thin layers. The 3D printer builds an object by building one layer on top of the next, until the object is complete.

See Introduction to 3D Printing at the library or katonahlibrary.org for more information.

**Copyright & Fair use**

The user is responsible for ensuring that they do not violate any copyright or patents.

**General Requirements**

A patron must have completed a training session at the Katonah Village Library (other trainings on 3D printing will not be honored). Patrons can sign up for a training session in person or over the phone. 3D Printer users under 12 years old must be accompanied by a parent/guardian to use the printer.

**\*\*The Katonah Village Library has the right to approve or reject any 3D printed project\*\***

**Katonah Village Library**  ◊ 26 Bedford Rd, Katonah ◊ katonahlibrary.org ◊ 914-232-3508 ◊ katref@wlsmail.org

**Safety**

Some parts of the machine such as the nozzle can get very hot (230◦C/446◦F). Touching them can result in a serious burn. Please do not touch the nozzle or the build plate while the machine is in progress. Also refrain from dangling hair etc. over the printer as it may become tangled in the machine. Doing so can cause damage and/or injury.

**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. Payment for plastic used is expected even if the print fails.

In all cases it is the ultimate responsibility of the patron to ensure their print succeeds. A 3D Printing Instructor is available for consulting on projects and a 3D Print Checklist is available at the library and at katonahlibrary.org to help ensure print success.

**Printing In Person (supervised):**

Patrons are allowed to print under the supervision of the 3D Printing Instructor by appointment after passing one training session. An appointment must be made in person or over the phone during printing hours. Printing hours are subject to change depending on staff availability and/or weather conditions. Appointments are for 1 hour. If your project exceeds 1 hour, depending on availability, you may book a longer appointment.

**Printing In Person (unsupervised):**

Patrons are allowed to use the printer during library hours at their own discretion without supervision if they have a 3D Printing Certification sticker. To get certified, you must:

1) Be a Westchester Library System patron

2) Attend at least one 1-on-1 3D Printing Session

3) Sign & hand in to a librarian, or submit in the online test, the 3D Printing Policy

http://katonahlibrary.org/test/wp-content/uploads/2014/07/3D-Printer-Policy-12.pdf

4) Taken and passed the online test

Unless they sign up for a time slot in person or over the phone, printer availability is not guaranteed. Any damage to the printer itself is also to be paid by the patron. We do not allow overnight prints. Payment is to be made to the front desk.

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 often as fatal errors can occur such as filament tangling. Refer to the 3D Printing Solo guide for what to look out for. If a fatal 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.

**How often may I print?**

You may print once a week. 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.

**Submitting A Print Job:**

After attending one training session at the Katonah Village Library, patrons may submit print jobs for later pick up and payment. After submitting a 3D file either through email or in person on a flash drive, the 3D printing instructor will check your 3D model and oversee the printing without your presence necessary. Responsibility for the print is still that of the patron submitting the job, and payment is expected for plastic used even in the case of print failure. See Submitting A 3D Print Job for full details.

**Websites or programs for 3D Printing**

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

Approved by Board of Trustees 06.24.2014

**3D Printer User Agreement**

**LIBRARY PATRON COPY**

The undersigned hereby agrees to abide by the terms Katonah Village Library’s 3D printer policy. By signing below I confirm that I have read and understood all of the above Katonah Village Library’s 3D printer policy terms. The undersigned also confirms and agrees my failure to comply with any terms of the above policy may, at the sole discretion of the library staff, result in revocation of some or all of my Katonah Village Library privileges. The undersigned further understands and agrees that the Katonah Village Library is not responsible for any injuries resulting with use of the 3D printer.

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent/Guardian Signature (if under 14) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Address\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

E-mail Address\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Telephone\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date\_\_\_\_\_\_\_\_\_\_ Staff Member Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**3D Printing User Agreement**

**LIBRARY COPY- *give to 3D Printing Instructor or available librarian***

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E-mail Address\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Telephone\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date\_\_\_\_\_\_\_\_\_\_ Staff Member Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_