

Joliet Public Library 3D Printing Rules and Procedures

1. The Library currently owns 2 Makerbot Replicator Generation 5 3D printer models. Each has a maximum build volume of approximately 25L x 20W x 15H (cm) with an adjustable resolution as fine as 100 microns (.1 mm). Each is directly connected to a PC via USB. The Makerbot Desktop software is used to render 3D models into files compatible with our specific model 3D printer. The printers melt PLA Plastic at 215°C and pass it through a Smart Extruder to render it into physical objects via a process called additive manufacturing.
2. All 3D printing will be performed by a Joliet Public Library staff member. Patrons may not operate the 3D printers but are welcome to observe the 3D printers in action.
3. A nominal fee will be charged for the production and materials to print 3D objects.
 - a. A \$1.00 fee will be charged for setting a print job.
 - b. A \$0.10 fee will be charged for each 1 gram of plastic used (rounded up to the next whole gram) including a raft and any supports if required or requested.
 - c. At the staff's discretion, the setup fee may be waived when additional copies of the same item is requested within a 90 day period of the original print.
4. The Library reserves the right to refuse to print any object at staff's discretion.
5. The Library's 3D printers may be used only for safe and lawful purposes. Patrons will not be permitted to use the Library's 3D printers to create materials that are:
 - a. Prohibited by local, state or federal law.
 - b. Unsafe, harmful, dangerous or that pose an immediate threat to the well-being of others.
 - c. Likely to fail or print incorrectly or likely to cause damage to the 3D printer.
 - d. In violation of another's intellectual property rights. For example, the printers will not be used to produce objects which violate copyright, patent, or trademark protection.
6. The Library's printers may be used to print objects which meet the above criteria and which are:
 - a. Designed by the requesting patron.
 - b. Available from thingiverse.com with at least one successful print listed.
 - c. In the Library's collection of known good 3D designs.
7. In addition to the 3D Printing Rules and Procedures, patrons will abide by the Digital Media Studio Use Policy approved by the Board of Trustees on March 19, 2015.

The procedure for 3D printing is as follows:

1. Object Design
 - a. Any 3D drafting software may be used to create a design as long as the file can be saved in .stl, .obj, or .thing file format.
 - b. Creating a new design requires an advanced knowledge of 3D modeling software products. Video tutorials that accompany CAD programs can be of assistance. Library staff cannot be of assistance in new design creation.
 - c. Computers located in the Digital Media Studio have the 3D modeling software Google Sketchup and Blender available for object design purposes. Again, these programs require advanced knowledge to utilize and Library staff cannot assist patrons in their use.
 - d. Many designs are available online from file-sharing sites like thingiverse.com free of charge. Others are available for sale from various sites.
 - e. The Library maintains a small collection of objects which are available to print. These may be found at www.jolietlibrary.org/3Dprinting
2. Submitting a Design

Patrons can submit their 3D printer project by email to DMS+3Dprint@jolietlibrary.org. The following information must be included:

 - a. Full Name
 - b. Library Card Number
 - c. Phone Number
 - d. Digital File (in .stl, .obj, or .thing file format) or a Link to the object on a website such as Thingiverse.com or similar.

3. Final Approval
 - a. After submitting a design staff will review the item to be printed for adherence to the Digital Media Studio Policy and to evaluate the printing cost.
 - b. Staff will then contact the submitting patron by email or phone to notify them if their design has been approved or rejected and advise the patron the cost of the project. Patron will approve or forgo printing of the job.
 - c. The patron will be contacted once their design has been approved or rejected for printing.
 - d. Staff will inform the patron the cost of the project. The patron will approve or decline the printing of the job. If the patron chooses to move forward with printing, the patron will be responsible for the cost of the project.

4. Upon Completion of Print Job
 - a. The patron will be contacted upon the completion of the print job.
 - b. Once contacted, the patron will have 7 days to pick up and pay for their item. If the item is not picked up within this time period, the item becomes the property of the Library and may be kept, discarded or resold at staff discretion.