

Adopted 2/10/2015

## **Boyne District Library 3D Printer Policy and Procedure**

### **PURPOSE**

The Library desires to offer community access to new and emerging technologies such as 3D printers to inspire a new interest in design and help the community to bring their creations to life. This policy establishes how and under what circumstances the public may use the Library's 3D printers.

### **POLICY**

The Library's 3D printers are available to the public to make three-dimensional objects in plastic using a design that is uploaded from a digital computer file.

The Library's 3D printers may be used only for lawful purposes. The public will not be permitted to use the Library's 3D printers to create material that is:

**Prohibited by local, state or federal law.**

**Unsafe, harmful, dangerous or poses an immediate threat to the well-being of others. (Such use may violate the terms of use of the manufacturer.)**

**Obscene or otherwise inappropriate for the Library environment.**

**In violation of another's intellectual property rights. For example, the printers will not be used to reproduce material that is subject to copyright, patent or trademark protection. The patron is solely responsible for any violation of copyright, patent or trademark laws. The library will not research submissions for originality.**

**The Library reserves the right to refuse any 3D print request.**

Cost: 3D printing pricing is based on the weight of the object in grams: .20¢ per gram. You will be notified prior to printing the estimated cost of your item. Items must be paid for prior to printing.

The library's MakerSpace staff will work with you to determine the best resolution and infill for your model. We cannot guarantee how your model will turn out, however, you are responsible for all printing costs.

Items printed from Library 3D printers that are not picked up within 7 days will become property of the Library. Items must be picked up by the individual who printed them.

Only designated Library staff and volunteers will have hands-on access to the 3D printer.

## **PROCEDURES**

The procedure for printing from the Library's 3D printers is as follows:

### **Design creation:**

We recommend the free, online program called Tinkercad. You can sign up for an account with just an email address. All of your work can then be saved in the .stl format needed to use the library's MakerBot 3D printer. Other possible programs are Sketchup or AutoDesk123D. 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.

Digital designs also are available from various file-sharing databases such as Thingiverse.com.

The library's MakerSpace staff will be happy to show you the basics of Tinkercad and to direct you to online resources, however, we will not be able to help you design your model. The true idea of a MakerSpace is to work together with like-minded community members to learn new skills.

### **Submitting a design for printing:**

Persons wanting to use the 3D printer shall bring their file (in .stl, .obj, or .thing file format) (no larger than 25MB) to the library on designated days. Staff will add the model to the printing queue.

The Library will schedule only one print per MakerDay per person.

The files will be readied for printing in MakerWare or other authorized software. The Library will view all files in MakerWare or other authorized software before printing.

Printing will be first-come, first-served. Your file will be placed in the queue in the order it was received. We do retain the right to reorder the queue based on printing times and staff availability. Printing time varies based on the size of the object. Small objects can take less than an hour, while large projects can take five or more hours.

9.9 x 7.8 x 5.9 inches is the largest size we can print.

Please note that procedures governing the use of the Library's 3D printers are subject to change.

## **DEFINITIONS**

3D printing: the process of making a physical object from a digital model.

3D Printer: A 3D printer uses melted plastic to produce objects designed on a computer.