# **3D Printing**

## Purpose:

In keeping with our vision to create a thriving community built on shared strengths where the library will always be a highly valued community asset, and our goal to be a positive environment for mobile and digital literacy the Tuscaloosa Public Library strives to offer community access to new and emerging technologies such as 3D scanners and printers. These regulations establish how and under what circumstances the public may use the Library's 3D printers and 3D scanner.

## **Regulations:**

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.

- I. 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:
  - a. Prohibited by local, state or federal law.
  - b. 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.)
  - c. Obscene or otherwise inappropriate for the Library environment.
  - d. 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.
- II. The Library reserves the right to refuse any 3D print request.
- III. **Cost:** 3D printing at the Library is .10 cents per gram of material used of ABS or PLA, and . 20 cents per gram of material used of specialty filament.
- IV. 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.
- V. Only designated Library staff and volunteers will have hands-on access to the 3D printer.
- VI. The Library is not liable for any malfunctions or misprints.

VII. To learn how to create designs, we can provide you with a list of helpful tutorials. We do recommend you either stay for the length of your print, or check in with your print periodically.

#### **Procedures:**

### I. Design creation:

- a. Creating a new design requires an advanced knowledge of 3D modeling software products. Video tutorials that accompany CAD (Computer Assisted Drawing) programs can be of assistance.
- b. 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.
- c. Tinkercad is free, online 3D drawing software that allows you to design pieces to print on a 3D printer. With a free account, you can save your work automatically "in the cloud" and come on by the Edna Turner Learning Center to print it out. It is a simple software to learn, and includes fun and easy tutorials. Check it out at home or at the Edna Turner Learning Center.
- d. Digital designs also are available from various repositories such as Thingiverse.com.

#### II. Printer availability:

- a. Persons wanting to use the 3D printer shall bring their file (in .stl, .obj, or.thing file format).
- b. If there is high demand, the Library will schedule only one print per day per person.
- c. The Library will view all files in Cura or other authorized software before printing.
- d. Wait/pickup time: Items may be picked up in the Edna Turner Learning Center. It is sometimes difficult to estimate exact print times. Library staff will make an educated guess about the length of a job upon request.
- e. Prints must be paid for at the Reference or Circulation desks at time of print out.
- III. Please note that the procedures for the use of the Library's 3D printers are subject to change.
  - a. Due Covid-19, the library is operating with limited hours. 3D print submissions are only available online. Pickups will be schedule via email.