

## #1 Designing Objects

1. The 3D printers can be used with basic knowledge of Computer Assisted Drawing (CAD). Creating a totally new design requires an advanced knowledge of 3D modeling software products. Library staff may be of some assistance, but cannot be responsible for knowing all aspects of all CAD applications.
2. 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. The library, at the moment, has computers with limited capability software for creating such files.
3. Digital designs are also available from various file-sharing databases such as Thingiverse, Cubify, and Tinkercad.
4. Max build size for the FlashForge Finder:  
 Single extrusion: 140mm x 140mm x 140mm  
  
 Max build size for the Ultimaker 3:  
 Single extrusion: 215mm x 215mm x 200mm  
 Dual extrusion: 197mm x 215mm x 200mm

## #2

## Printing and Pickup

*Before you 3D print for the first time, please:*

1. Read the MetaSpace 511 Policy. Sign the completed User Agreement and Release of Liability Form for use of MetaSpace 511's equipment and return to staff.
2. Submit your project file either in-person at the Reference Desk or via e-mail to [muk3Dprinting@gmail.com](mailto:muk3Dprinting@gmail.com)
3. We will e-mail you (within 48 hours) an estimate prior to printing your project and will let you know the exact price once the print job has finished.
4. Patron should reply and approve the quote.
5. Your project will be scheduled to print and you will be notified upon completion.
6. Pay for and pick up your project within 7 days of completion from the Circulation Desk. (If you do not pick up your object, the library will add the cost of the 3D print to your library card.)

**#3**

### **3D Printing Costs**

1. You will be informed of an estimate prior to printing your specific project. This is only an estimate and the exact cost will be determined after the print job is complete.
2. Cost: .10¢ per gram
3. If a project cannot be completed due to mechanical error, you will not be charged.

**#4**

### **3D Printing Guidelines**

1. Staff reserve the right to deny the use of tools, equipment, or consumable materials, or to halt, delete, or cancel the creation of items that violate any library policy.
2. 3D printers may be used only for lawful purposes. Users may not request printing of material that is:
  - Prohibited by local, state, or federal law.
  - Unsafe, harmful, dangerous or poses an immediate threat to the wellbeing of others
  - Obscene or otherwise inappropriate for the library environment

#4

### **3D Printing Guidelines (continued)**

- In violation of another's intellectual property rights
- Regulated or requires a license to use or carry
- In violation of any of the library's policies.

#5

1. Please note that the procedures governing the use of the library's 3D printers are subject to change at any time.