

Makers' Lab Equipment & Safety Guidelines

Please note that these Guidelines and Procedures governing the use of the Buda Public Library Makers' Lab are subject to change. *Updated 8/14/2019*

Items in the Makers' Lab are available during open hours. Equipment that requires long print times such as the 3D printer will be printed outside of open hours.

- Equipment availability runs on a first come, first served basis and may require prior reservations. See equipment chart for full list of items and reservation requirements.
- Certain equipment is subject to training prior to use. Users should not attempt to operate equipment that they are unsure of.
- During open access hour, minors under the age of twelve are not permitted but are welcome during age specific programs (see website for details). Minors 12-18 must have a parent/guardian sign an agreement.
- Users may use consumable materials provided by the Makers' Lab. Some consumables may have associated fees. The library does not guarantee consumable items and are only able to provide consumable materials on a limited basis. Users should work to avoid wasting consumable supplies and materials when possible.
- Users may bring their own consumable materials to meet the needs of their project. Compatibility of the material and the equipment used will be determined by the staff person facilitating the open hours.
- Pop Up Makerspace items (contained within Festool bins) may not be available from week to week. If items are available, participants must ask a staff member to unpack them.
- No projects or makerspace materials will be conducted or placed on the tables containing the laser cutter and 3D printer.
- Users must clean up project areas and materials used after each project is completed.
- Projects cannot be left in the Makers' Lab from week to week unless given specific permission. Projects can be taken home and brought back to be completed if necessary.
- Users are expected to follow common safety practices while using equipment. In the event of a minor accident or injury, program participants must report the incident to library staff immediately. In the case of an emergency, call 911.
- Users are responsible for their own personal property while using the Makers' Lab. Care should be taken to avoid loss or damage.

Donations

Donations of materials for the Makers' Lab are welcomed but require **approval** by library staff **before** they can be accepted. Please contact the Buda Public Library for current material needs.

3D Printer Guidelines

General 3D Printer Information & Guidelines:

- The Buda Public Library accepts 3D print requests through e-mail. E-mail file to cfoley@budalibrary.org
- Any person wanting to print an item must come during Makers' Lab Open Hours or make an appointment to discuss print with staff prior to sending file or have attended a library program based on 3D printing
- Print jobs will be completed in the order that they are received. (Due to possible demand, it may take up to two weeks for submissions to be printed.)
- Once completed, Library Staff will notify the applicant by email that their object is ready for pick-up.
- Requested 3D prints must be submitted as an STL file.
- Files must be uncorrupted. Staff will not try to print an item more than twice.
- The object(s) must be capable of being printed during one run
- Library print programs take precedence over other print runs, so submitting a request around the same time as a program may result in a delay of printing.

3D Printing Specifications

Cost	\$0.05 / gram
Print Area	6.3" x 6.3" x 7.09"
Run Limits	Each job must be able to be completed in one run
Time Limits	Must not take longer than 2 hours. If larger, the print may be scaled own or made hollow if the printer's capacity.

Time Reference (with recommended settings)

2" x 2" x 2" Cube2 hours and 39 minutes

Fee Schedule and Payment

There is no fee for using Makers' Lab Equipment and many materials in the Makers' Lab are free of charge with consumable limits. Users are permitted to bring their own pre-approved materials for projects.

Proofgrade Laser Cut Material (size: 10" x 6")

Acrylic (clear or black)	\$2.50
Medium Draftboard	\$1.00
Thick Draftboard	\$1.50
Medium Basswood Plywood	\$2.75
Thick Basswood Plywood	\$3.75

Other Makerspace Items

Mayku Form Sheet	\$1.50
3D filament for 3D prints (per gram)	\$0.05

Users need to make arrangements to pay for materials prior to the beginning of open hours if possible. The library accepts cash and check. Users may pay on credit card if the charge is more than \$5.00 and if user has an active library account. Payment must be received before receiving materials.

Makers' Lab Equipment Availability Reservations, Consumable Supplies, and Training

The following chart contains all items available during the Makers' Lab. This chart is subject to change at any time and should be referenced before visiting Open Hours.

Project	Equipment provided	Consumable Limit per session and material fees (if applicable)	Are participants allowed to bring own consumable and terms
3D pens ▲	Scribblr V3	One sample of filament	Yes – PLA, size: 1.75 mm
3D printer (Prints will be made outside of Open Hours)	Mini Lulzbot	See 3D printer guidelines, fees apply	Not allowed
3D Scanner	Matter and Form	Not applicable	Not applicable
Block Printing	Carving tools, block printing ink	One linoleum block	yes
Button Maker ▲	1.25" Circle Tecre Button Maker	Up to 20 buttons provided	Button supplies not allowed. May bring printed artwork (recommended size 1.5" circle)
Cricut Machines* ▲	Cricuit Air, Cricut Maker pens	Equivalent to 3 pieces of cardstock, 6" x 12" vinyl if available	Yes - anything listed on approved materials through Cricuit
Embroidery/Cross Stitch	Needles, Hoops, Thread	Scrap fabric, thread, hoops provided but must be left at library	Yes
Jewelry Making	Basic hand tools	Limited to making one item (pair of earrings, 1 necklace, 1 keychain, etc.)	Yes
Knitting/Crochet	Crochet needles, knitting needles	No limit during Open Hours. Excess yarn cannot go home unless permission granted.	Yes – all yarn accepted
Laser Cutter* ▲	Glowforge Plus	Cardboard sheet, fees apply for Proofgrade materials (10"x6"): Acrylic.....\$2.50 Medium Draftboard.....\$1.00 Thick Draftboard.....\$1.50 Medium Basswood Plywood.....\$2.75 Thick Basswood Plywood.....\$3.75	Yes-with prior approval from staff. Laster cutter can engrave organic material under 1" and cut through material under ¼". The max printable area is 11" by 19.5". Acceptable materials include hard wood, cardboard, paper (can also be cut by cricut machine), leather, etc. Users should know what kind of material they have purchased and whether it's been treated or not. We will not accept cork, PVC, or plywood.
Mayku Vacuform ▲	Mayku Vacuform	Mayku Form Sheets.....\$1.50 Mayku Cast Sheet\$1.50	Users can purchase their own Mayku Form/Cast sheets.

Perler Beads	Iron, Plates, Parchment Paper	Perler beads for a single plate project	Yes – Users can bring Perler Beads
Polymer Clay	Basic Hand Tools, Toaster Oven	Sculpey Glue, toothpicks, sample amount of clay available not to exceed 1 oz	Yes – Users should have information regarding cooking time and temperature to use library toaster oven
Sewing – Machine ▲	Singer Start 1304, Singer Quantum Stylist 9960	Scrap fabric, up to one fat quarter, basic white and black thread	Yes – all fabrics, thread can be brought in but bobbin remains at library (including all remaining thread), class 15 bobbin if verified
Sewing – Hand	Various needles and basics tools	Scrap fabric, up to one fat quarter, basic white and black thread	Yes – all fabrics and thread
Shrinky Dink	Toaster Oven	Sample amount of shrink dink paper (limited to ½ page), sharpies, brushes, paint	Yes
Tools ▲	General tools including Hammer, Screw Driver, Drill, Dremel, Small Clamps, Wood Glue, Gorilla Glue, etc.	Not applicable	Not applicable

*Reservation prior to Open Hours available

▲ Training required to operate without staff