

Innovation Lab User and Materials Guidelines

GENERAL INFORMATION

- Innovation Lab Open Hours:
 - Monday & Saturday: 1-5 p.m.
 - Tuesday & Thursday: 4-8 p.m.
- For more information visit pasadenapubliclibrary.net/steam or call (626) 744-4066, option 7.

USER GUIDELINES

- In order to use the Innovation Lab (iLab), patrons must have attended an Innovation Lab Orientation, have a signed waiver sheet on file, and have a library account in good standing.
- Upon arrival, users must check-in with the iLab Monitor, present a library card or picture ID, and sign the iLab sign-in sheet.
- Users must sign-in for the machine they want to use.
- Patrons may reserve the machine that they want to use for 1 hour at a time, except for the 3D printers, which may be reserved for two hours at a time.
- Users can extend their time past the initial period designated on the sign-in sheet if no one is waiting.
- Patrons may call the Central Library, (626)744-4066, option 7, to reserve a slot on a specific machine. Reservations can only be placed on the same day that the machine will be used. Patrons may only place one reservation per day.
- Machines that have been reserved in advance will be held for 10 minutes past the start of the hour. After 10 minutes, the machine will be released to the next patron waiting.
- iLab computers are to be used for iLab projects only. Monitors may ask patrons to relocate to the Internet Commons if they are not using the computers for iLab projects.
- The Library does not allow patrons to use the iLab machines to create any licensed materials that will be sold for profit or anything that will be used as a weapon.
- The Library does not sell materials. Users must bring in their own materials to use on the machines. (See material guidelines below for more information on acceptable materials.)
- When a user brings material to use in the iLab machines, they must bring proof of the type of material such as a receipt or, for online purchases, an invoice.
- When users bring their own materials, the iLab Monitor must approve and write down the type of material before it may be used in the iLab machines.
- The iLab Monitor can help users with basic machine setup and simple orientation to software; as time-permits, monitors can help with other questions to the best of their ability.
- Food or beverages are not permitted in the iLab, except water in a container with a secure top. Any water bottles must be kept on the worktable in the center of the room and cannot be placed on any of the tables or carts holding machines.

MATERIALS GUIDELINES

3D Printers

- Check current free use guidelines in the iLab for information on free materials
- iLab users can bring in their own filament as long as it is the correct type for the machine(s) (see acceptable filament lists below)
- If users wish to bring a design to the lab, the Library recommends saving it on a USB drive
- The 3D printers can print from file types .stl and .obj
- 3D designs can be created in many programs. Check the Innovation Lab Guide online for more information on 3D design software at cityofpasadena.libguides.com/ilab
- LULZBOT TAZ 6
 - Lulzbot store: <https://www.lulzbot.com/store/filament>
 - If a user purchases filament from a different store, it must follow the acceptable filament guidelines and diameter for Lulzbot Taz 6
 - Acceptable filament: ABS, HIPS, PLA, magnetic iron, nGen, stainless steel PLA, laybrick, laywood-D3, n-vent, INOVA-1800, t-glase, bridge, PCTPE, 910, conductive PLA, PC-ABS, polycarbonate, PVA, 618 nylon, 645 nylon
 - Filament diameter - 3mm
- The Library assumes no responsibility for any damage that may occur to participant's materials or projects in the iLab.
- The Library assumes no responsibility for any errors that occur as a results of designs that are not properly formatted or constructed.

Carvey

- The Carvey accepts vector graphics files in file type .svg. It also has an image trace function which can create vector graphics from a .jpg or .png file. For best results using this feature a silhouette or clipart style image should be used.
- Users can import files into Easel, the free, web-based software used to connect to the Carvey. Users can create a free account online at easel.inventables.com.
- iLab users must bring in their own materials or check with current free use guidelines in the iLab for information on free materials
- Users can purchase materials from inventables.com, or bring in a flat piece of acceptable material.
- Acceptable materials: ABS, acrylic, HDPE, hard and soft woods of any natural wood species, aluminum, corian, FR1 machinable circuit board blanks, delrin, expanded PVC, machinable foam, machinable wax
 - For safety limits and more information about materials, please visit: <http://carvey-instructions.inventables.com/materials/>

- Maximum size for materials: cutting area is 11.7" x 8" x 2.5".
- If Monitors cannot determine the type of material, it cannot be used with the equipment.
- The Library assumes no responsibility for any damage that may occur to participant's materials or projects in the iLab.
- The Library assumes no responsibility for any errors that occur as a results of designs that are not properly formatted or constructed.

Full Spectrum Laser Cutter

- The laser cutter accepts raster graphics in file types .bmp, .jpg and .png and vector graphics files in types .xps, .pdf and .svg. For best results, use a .bmp or .xps file.
- iLab users must bring in their own materials or check with current free use guidelines in the iLab for information on free materials
- Users can bring in a flat piece of material that is acceptable
- Acceptable materials: Acrylic, UHMW/HDPE, delrin, mylar, hard and soft woods of any natural wood species, other wood based products including MDF and paper, anodized aluminum, steel, plain carbon steel, low odor rubber, silicone, vulcanized rubber, denim, leather, marble, granite, ceramic tile, agate, glass
- UNACCEPTABLE MATERIALS: NEVER engrave or cut any material containing PVC, vinyl, or polycarbonates as these materials can give off hazardous fumes when in contact with the laser.
 - For more information on acceptable materials, please visit: <https://fslaser.com/Applications>
- Maximum size for materials: cutting area is 20" x 12" x 1.5".
- If monitors cannot determine what the type of material, it cannot be used with the equipment.
- The Library assumes no responsibility for any damage that may occur to participant's materials or projects in the iLab.
- The Library assumes no responsibility for any errors that occur as a results of designs that are not properly formatted or constructed.

Embroidery & Sewing Machine

- Users can bring their own fabric or thread.
- For embroidery, users can bring their own designs preloaded on a flash drive or SD card. Designs must be formatted as a .pes file for the Brother PE770 to read it.
- The Library assumes no responsibility for any damage that may occur to participant's materials or projects in the iLab.
- The Library assumes no responsibility for any errors that occur as a results of designs that are not properly formatted or constructed.

Design Computers

- iLab design computers are loaded with the following design software:
 - Adobe Creative Suite
 - Adobe Illustrator
 - Adobe Photoshop
 - Adobe Lightroom
 - Adobe InDesign
 - CorelDRAW Graphics Suite 2018
 - CorelDRAW
 - CorelCONNECT
 - CorelPHOTO-PAINT
 - CorelCAPTURE
 - Inkscape
 - Blender
 - OpenSCAD
 - FreeCAD
 - SketchUp Free
 - Microsoft Office Suite