

## STAFF PROCEDURES FOR 3D PRINTING IN THE LIBRARY

1. The following condition must be met to request a 3D print:
  - Customers must have their own personal, **valid full service** JGRS library card
  
2. **Customer** should:
  - Ready the file for print in the Makerbot software or other authorized software
  - Submit only one file at a time
  - Download a 3D print request form from the JGRS Website
  - Submit the form with file (in .stl or .obj format) (no larger than 25MB) by email to [3DPrinting@jgrs.org](mailto:3DPrinting@jgrs.org) or in person at any JGRS library branch on a flash drive
  - Pick up the 3D print within 7 business days once printing is complete at the Pascagoula Public Library Circulation Desk during library hours
  
3. **If file is submitted in person, Staff member** should:
  - View the file in Makerbot or other authorized software
  - Prepare file for printing or contact patron if file is corrupted or invalid
  - Submit the file to designated 3D Printing email
  - Contact customer with printing estimate and
  - Contact customer when the product is finished and ready for pick-up along with cost of item
  - For questions please call the Pascagoula Public Library or Staff Development and Training
  
4. **Design creation:**
  - The 3D printer can be used with basic knowledge of Computer Assisted Drawing (CAD)
  - Creating a new design requires an advance knowledge of 3D modeling software products
  - Video tutorials that accompany CAD programs can be of assistance
  - Any 3D drafting software may be used to create a design as long as the file can be save in .stl or .obj format
  - Maximum dimensions for a print are 6" x 6 x 6"
  - Digital designs are also available from various file-sharing databases such as Thingiverse.com
  - Customers can take an available 3D printing beginning course at the CLIC lab located at Pascagoula Public Library
  
5. **Design Resources:**
  - **Makerbot Desktop:** free software used to prepare models for the Makerbot 3D printer. Program available in the electronic classroom at the Pascagoula Public Library or at <http://www.makerbot.com/desktop>
  - **Thingiverse:** Free, downloadable 3D models created and shared by makers all over the world. <http://www.thingiverse.com/>
  - **Tinkercad:** Free Web-based 3D modeling. <https://www.tinkercad.com/>

- **Sketch Up:** Free 3D modeling software. Available in the electronic classroom at the Pascagoula Public Library or at <http://www.sketchup.com/>