## **3D Printing Guidelines**

- 1) Please refer to the Technology Policy, section 6.0, for the rules governing the use of all creative equipment available at VBPL.
- 2) Current locations with 3D Printers include:
  - a) Bayside Library (1)
  - b) Great Neck Library (1)
  - c) Kempsville Library (1)
  - d) Joint-Use Library (2)
  - e) MEO Central Library (1)
  - f) Princess Anne Library (1)
- 3) Current 3D printers have two extruders one for the model material (PLA) and one for support material (PVA). Because one extruder is specifically for dissolvable support material, these printers only print one color at a time.
- 4) Customers must be trained by staff prior to use of the equipment.
  - a) Customers 12 and younger must be accompanied by a parent or guardian, and both must have completed an orientation.
  - b) Contact staff at a location providing this service to request an orientation.
- 5) All customers, including youth with parent/guardian, will sign a Terms of Use Agreement at the conclusion of the orientation.
- 6) Reservations are required through Library Market and are on a first come, first served basis.
  - a) Customers 12 and younger must be accompanied by a parent or guardian, and both must have completed an orientation.
  - b) Use Library Market (vbpl.librarymarket.com) to create a reservation.
  - c) Reservations must be made at least 24 hours in advance.
- 7) Customers will check-in at information desk at the beginning of the reservation.
- 8) Print jobs must be complete 30 minutes prior to closing.
- 9) Customers must use VBPL-provided PLA filament.
  - a) Colors and amounts are not guaranteed.

- 10) Acceptable file types are .STL and .OBJ to upload to UltiMaker Cura (<a href="https://ultimaker.com/software/ultimaker-cura/">https://ultimaker.com/software/ultimaker-cura/</a>) or UltiMaker Digital Factory (<a href="https://ultiMaker.com/software/ultimaker-cura/">UltiMaker.com/software/ultimaker-cura/</a>) or UltiMaker Digital Factory UltiMaker) and prepare as a .MAKERBOT file.
- 11) Customers are responsible for the entire printing process, including:
  - a) Turning on equipment.
  - b) Loading and unloading filament properly.
    - i) Storing filament properly using storage bags.
  - c) Preparing file for printing by either:
    - i) Using library computer, or
    - ii) Preparing file at home using appropriate printer software.
      - (1) Select appropriate printer model before exporting file to USB drive.
  - d) Staying with equipment for the first 20 minutes to mitigate any issues.
  - e) Removing the object upon completion.
    - i) Remove build plate from printer PRIOR to removing object.
    - ii) Remove object from build plate using appropriate VBPL-provided tools.
    - iii) Return tool to staff if stored at a service point.
  - f) Turning off printer when extruders are completely cooled (both at 50° C or less).
- 12) Customers must notify staff when done printing.