

University of Maine at Fort Kent

Blake Library

3D File Submission Form

Name: _____ Phone: _____

Email: _____

Patron type: ___ Community ___ Student ___ Faculty ___ Staff

File Name: _____ File Type must be .STL or already
built in CubePro for printing. See staff if you need help with building your .stl file to print.

Est. Time to Print: _____

Est. File Weight (grams): _____ x \$.20 per gram = \$ _____ (est.)

Colors: (1) _____ (2) _____ (3) _____

See second page for descriptions of the following:

Use CubePro to build file for printer:

Layer Resolution ___ 70um ___ 200um ___ 300um

Print Strength ___ Hollow ___ Strong ___ Almost Solid

Print Pattern ___ Lines/Cross Fill ___ Diamonds ___ Honeycomb

Supports included? ___ Yes ___ No Side walk included? ___ Yes ___ No

If shell is included, specify Color: _____

If supports are included, specify Color: _____

The following descriptions are from Cubify.com

Layer Resolution: The detail and smoothness of a printed model

0.070 = **1)** Great mode for parts requiring smooth surfaces; **2)** Layer lines are not very visible in these parts; **3)** Good mode for artistic parts with a smooth flow; **4)** Not the best mode for fine detail

0.200 = **1)** Best mode for general printing and most compatible mode for a wide range of geometries; **2)** Fine detail preservation for things like steeples, spires, sharp points, or thin walls

0.300 = **1)** A fast mode with thicker layers; Good for large parts with minimal detail

Print Strength: The strength of the inner structure of the printed model

Hollow = **1)** Fastest mode to produce a part; **2)** Hollow has fewer outer surfaces and larger print pattern spacing; **3)** Best for parts that will not be stressed

Strong = **1)** Medium amount of outer surfaces and smaller print pattern spacing; **2)** Best for parts that will have minimal physical abuse

Almost Solid = **1)** The most surfaces and the tightest print pattern spacing; **2)** The most robust part; **3)** Best for parts that will be stressed

Print Pattern: The design of the inner structure of a printed model. Depending on material, Lines or Cross Fill is available as the fastest print pattern.

Lines/Cross Fill = **1)** Fastest print fill pattern; **2)** Cross Fill: Minimal 2-direction cross bracing; **3)** Lines: Diagonal lines

Diamonds = Strong print pattern with 2-direction cross bracing

Honeycomb = Strong print pattern with 3-direction cross bracing

Sidewalk and Support: Select the types of materials used to create sidewalk and supports

Sidewalk Material = Choose material to print a sidewalk, it is a thin and wide rim that is placed around the part. It can be easily removed from the part after printing. The sidewalk prevents warping or part delamination from the print platform, this is due to different material properties or out of level print plate.

Support Material = Parts that contain overhanging elements may need supports to print successfully

Support Type = **1)** Points: Fine points that are easy to remove. It is best for curved surfaces; **2)** Line: Line intersects the part. It is best for flat surfaces.