FDM Printing Guide:

-FDM (Fuse Deposition Modeling) prints high quality 3D parts by extruding monochromatic ABS plastic. It also uses support material which is dissolved after printing is complete.

-Place your design into the 'Powder Printing' template file found on either:

> -Juno server: \\juno\Public\DigitalFabrication\FDM-Template-Tutorials)
> -UPenn Box fileshare folder: grp-sod-shop > CNC 3D File Submission > Templates
> (https://upenn.app.box.com/folder/122455942707)

-The black outlined bounding box in the template is the maximum printable size (8"x8"x12"). You may have multiple objects floating within this box.

-Asign all objects to the 'geometry layer.' Delete any extra layers or data in your template file. Files must be reduced to 64MB or smaller.

-Be sure that your object is closed. Any open parts to your object will result in a failed print. Use the Rhino command 'Showedges' on your object - any found/highlighted naked or non-manifold edges can result in printing errors. However, the FDM printing process generally is more forgiving with this than Powder Prining.

-The smallest recommended object thickness is 0.06 inches for FDM printing. Anything under 0.06 inches printed in ABS plastic has a potential of 'stringing' or 'fraying' while printing, resulting in a failed part.

-You may print objects that are at risk of failure, however you must sign an acknowledgment form in order to proceed.

-Material costs will be calculated before printing.