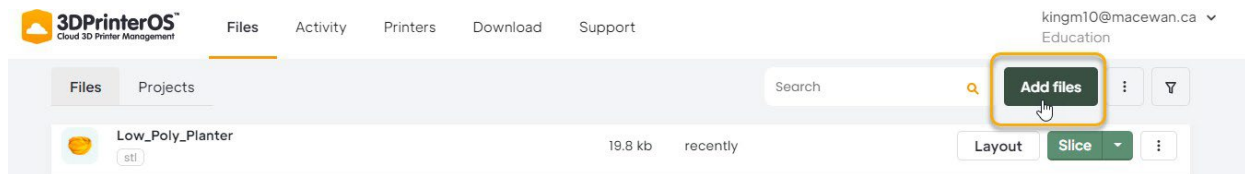# Welcome to remote 3D printing at the MacEwan University Library Makerspace!

STEP 1 - Log in

Use your regular MacEwan username and password on our 3D Printing page

STEP 2 - Upload

On the Files tab - click Add Files

Find a 3D file to print
- Search for an object to print on Thingiverse
  - Download the .stl file, it also accepts .obj
- You may already have designed an object using open source software like Tinkercad or Blender - make sure you have your file downloaded
- It accepts .gcode files if you have already sliced it using your own slicing software like Cura as long as you sliced for one of our available printers.

STEP 3 - Slice

To "slice" a 3D object means to create the set of instructions the 3D printer will need to print an object. Click Slice beside the file you want to print
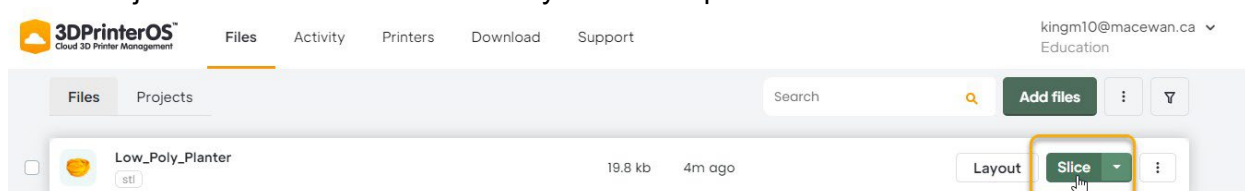
We have four kinds of printers available, Ultimaker 3 and S3, Creality K1 Max, and Bambu lab x1e. They essentially have the same capabilities.
For each printer, we have two ready made profiles to get you started:
- No support - for when you do not have any unsupported overhangs in your object
- Support - adds in support that can be removed after printing
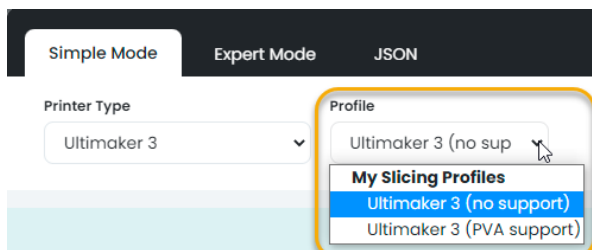
You can re-orient your object on the plate by clicking on layout.
You can choose to select your own individual settings. We recommend the following:
- Layer height - do not go less than 1 mm - 2 mm if it is a larger object
- Plate adhesion - brims work the best for things that have narrow bases
- Infill density - the more dense, the longer the print and the more material used, most objects don't need to be that solid - generally do not go over 50% infill

STEP 4 - Send

Click Print
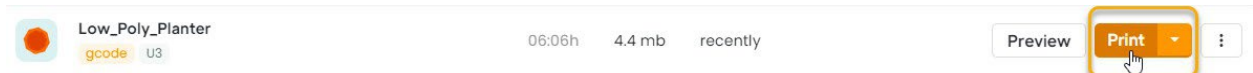
In the "Add a note" section please specify the colour you would like to print your object in. We have a list of regularly stocked colours on our website. Choose a printer and click "queue" to add your job to the list. We will start your job, and you will receive a notificiation by email.
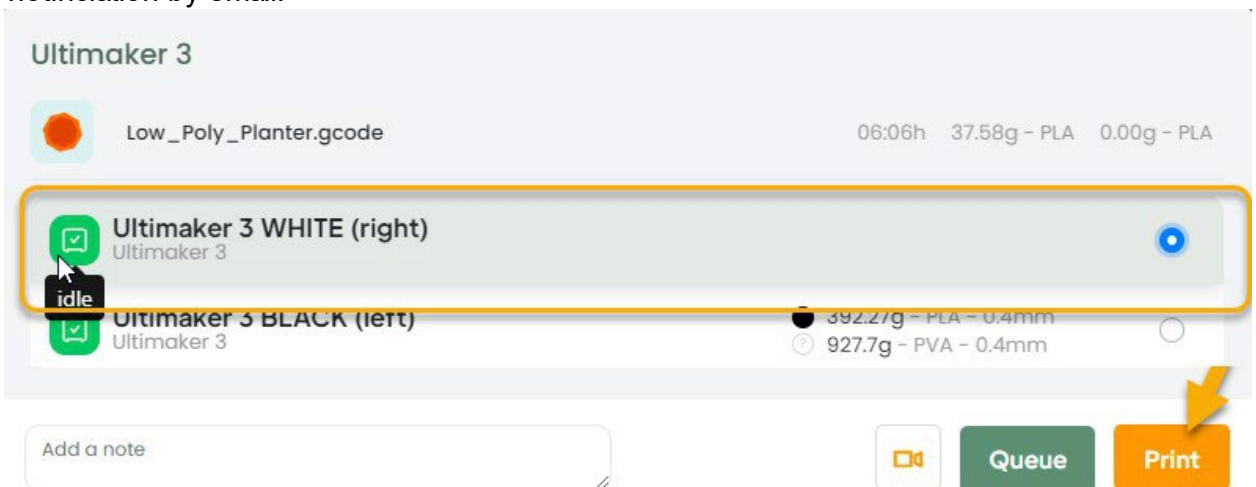
To watch your print start on the Printers tab, click on the Liveview wall tab.

Cancel the print on the Printers tab if you see something is not right.

You will be emailed when your print is ready for pickup.