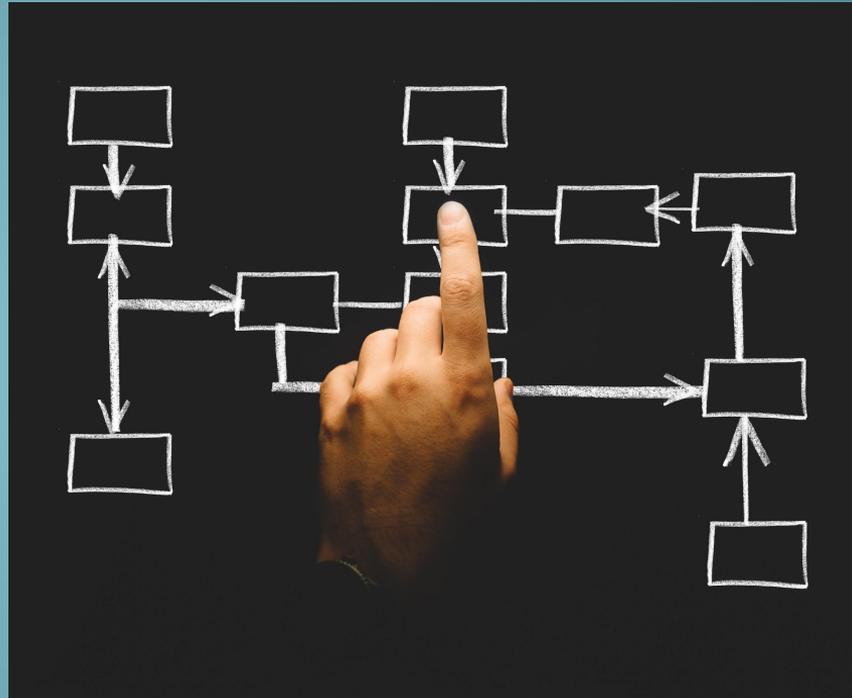


# Responsive Workflow

For 3D print queue  
management





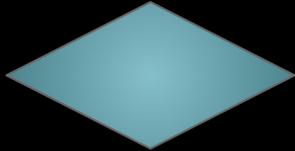
**Where we Started**



**Demand**



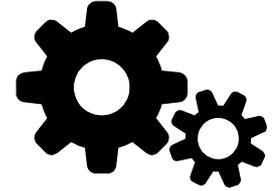
**Workflow Adjustments**



**Lessons Learned**



**Where we're going**



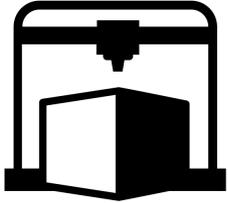
# Mediated Access





## **4 FT staff, 2 IT**

We later added 4 part time staff



## **3 Ultimaker printers**

We immediately added a 4th



## **0 restrictions**

We added some of these pretty quickly too

# Our 3D Printers

Ultimaker 2  
*Sir*  
*Prints-A-Lot*

Ultimaker 3  
*Maryam's*  
*Favourite*



Ultimaker 2  
Extended  
*Printcess*  
*Filamina*

Ultimaker 3  
*Fresh*  
*Printz of*  
*Bel-Air*

# Initial System Criteria

- Multiple technicians
- Track print process and conversations w/ users
- Easy for front desk staff to check status
- Customizable
- Reporting capability



**Martina**

@misping

Follow



We \*quietly\* went live with our 3D printing service today, recieved 6 print jobs in the first 20 minutes 🤔

6:35 PM - 10 Sep 2018

# System Limits



**1 print job at a time**



**1 object/print job**

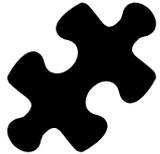


**academic priority**

# Service Limits



**24 hrs**



**10 pieces**



**No multiples**

# Form

**Martina King**

kingm10@macewan.ca

**Program / Faculty / School / Department**



**Course**



Please provide if this print request is related to coursework.

**Colour \***

**Second colour or material**

[How to set up your object with two colours.](#)

**Thingiverse link**

**File Upload**

# Views

Colour  Printer  Technician  Status

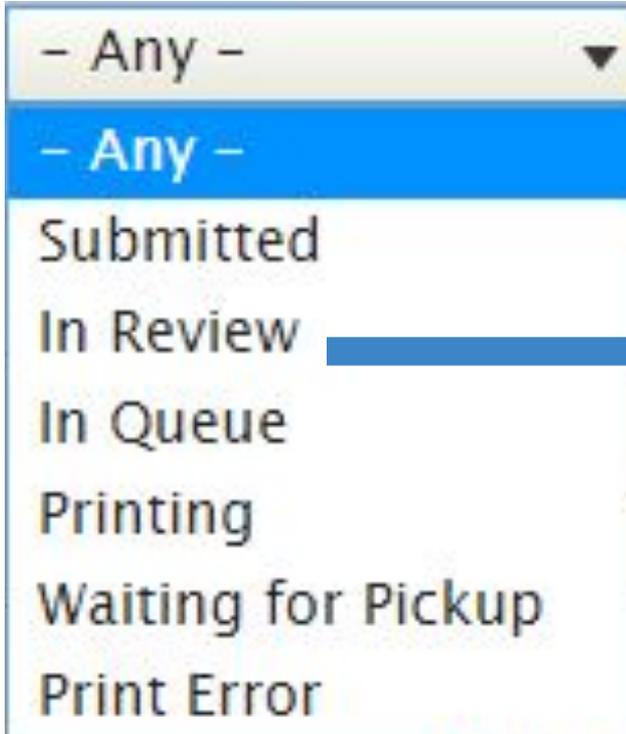
Apply

Reset

ID	STATUS	SUBMITTED	REQUESTED BY	COLOUR 1	COLOUR 2	LINK	3D MODEL FILE(S)	NO.	PRINTER	TTP	TECH
1087	Waiting for Pickup	2019-06-03	.@mymacewan.ca	Black (PLA)			• 	1	Ultimaker 2+	• 1 hr 16 min	SM
1086	Waiting for Pickup	2019-06-03	'@mymacewan.ca	Yellow (PLA)			• 	1	Ultimaker 3+	• 1 hr 18 min	SM
1080	In Queue	2019-05-31	@macewan.ca	White (PLA)		<a href="#">Go</a>		1	Ultimaker 2+	• 2 days 7 hr 54 min	SM
1067	Waiting for Pickup	2019-05-29*	.@mymacewan.ca	Silver (PLA)	Yellow (PLA)		• 	1	Ultimaker 2+	• 2 hr 34 min	MK

# Status & Details

**Status:**



- Any -

- Any -

Submitted

In Review

In Queue

Printing

Waiting for Pickup

Print Error

**Date Submitted:** Friday, May 10, 2019

**Due Date:** 2019-05-24

**Date Completed:** Tuesday, May 21, 2019

**Print Status:** Waiting for Pickup

**Program/Faculty/School/Department**

ITS

**Number of Copies:** 1

**Colour:** Black (PLA)

**Thingiverse Link**

<https://www.thingiverse.com/thing:1031950>

**Notes**

It says the hook is 19mm which I assume is the be fine for me, if that works for the printing.

**Copyright:** Yes

**Reuse:** No

**Permission:** Yes

**Printer:** Ultimaker 3+

**Printing Time**

7 hr

**Gcode File(s)**

 [UM3\\_Headphone\\_Hook\\_19mm \(1\).gcode](#)

**Technician:** Martina King

# 2018/19

## # 424 print jobs

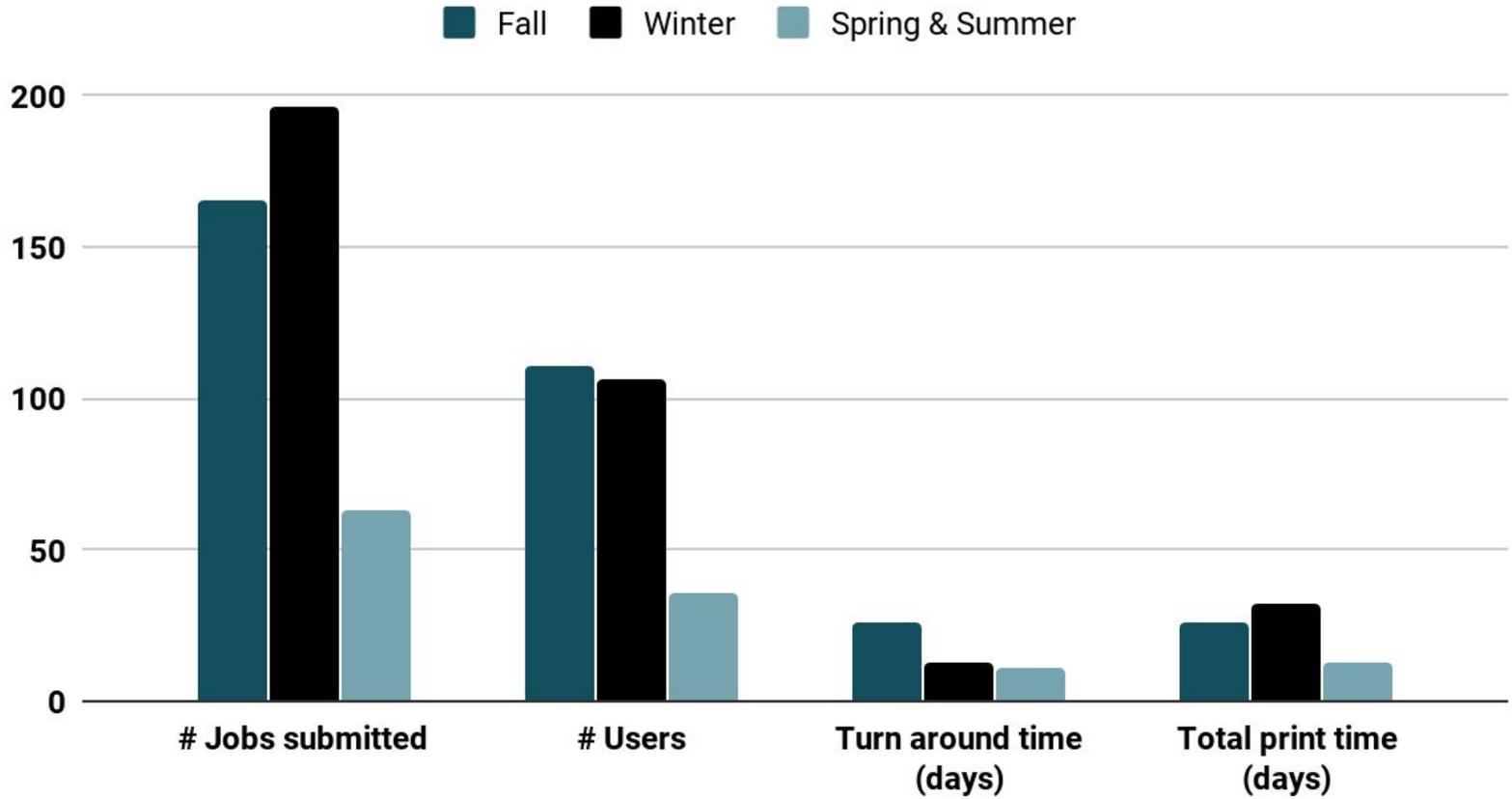


**Top 5 users submit  
7-16 print jobs/semester**

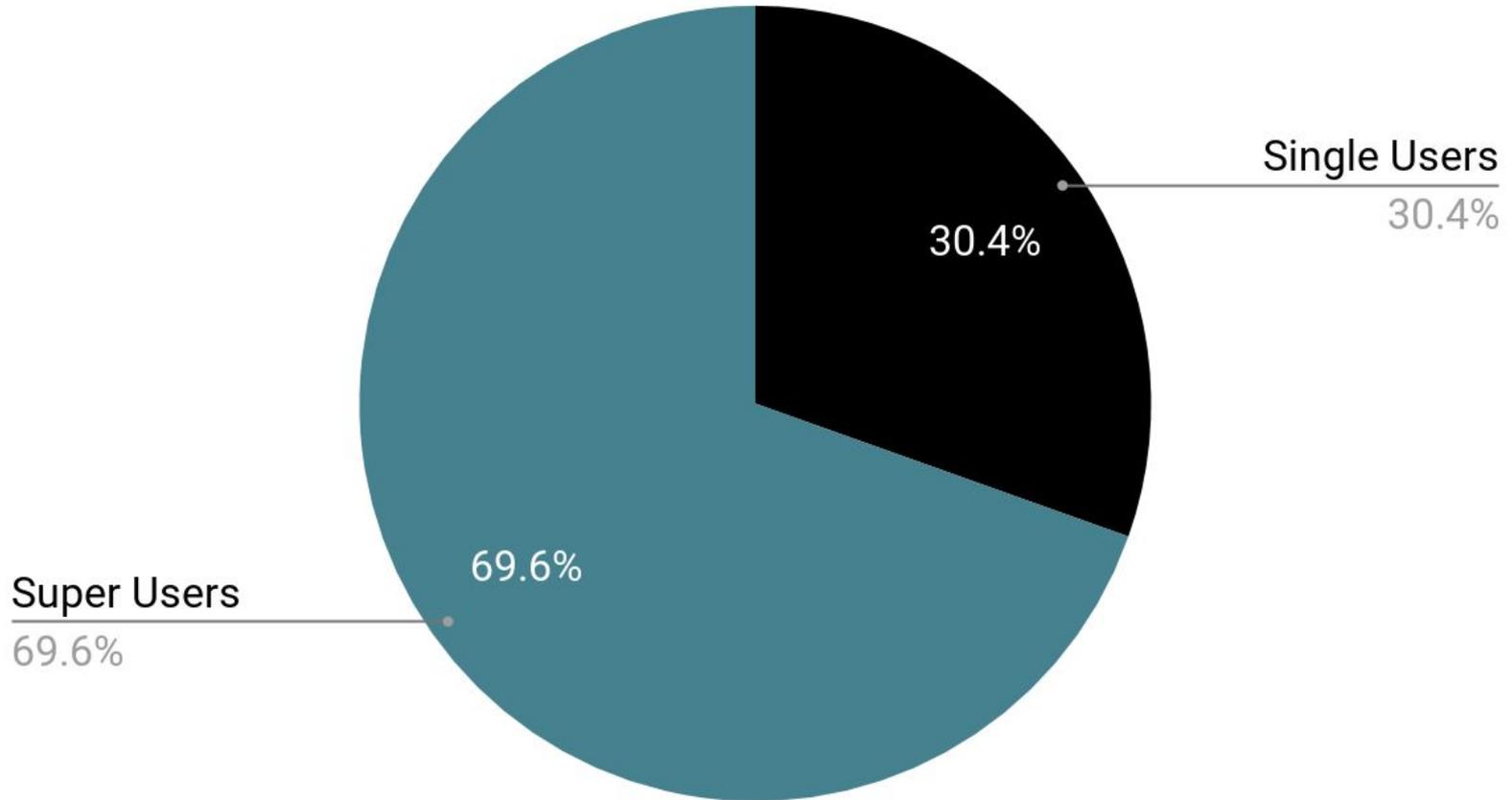


**Approx. 74 days of printing time  
4h 46 min avg/job**

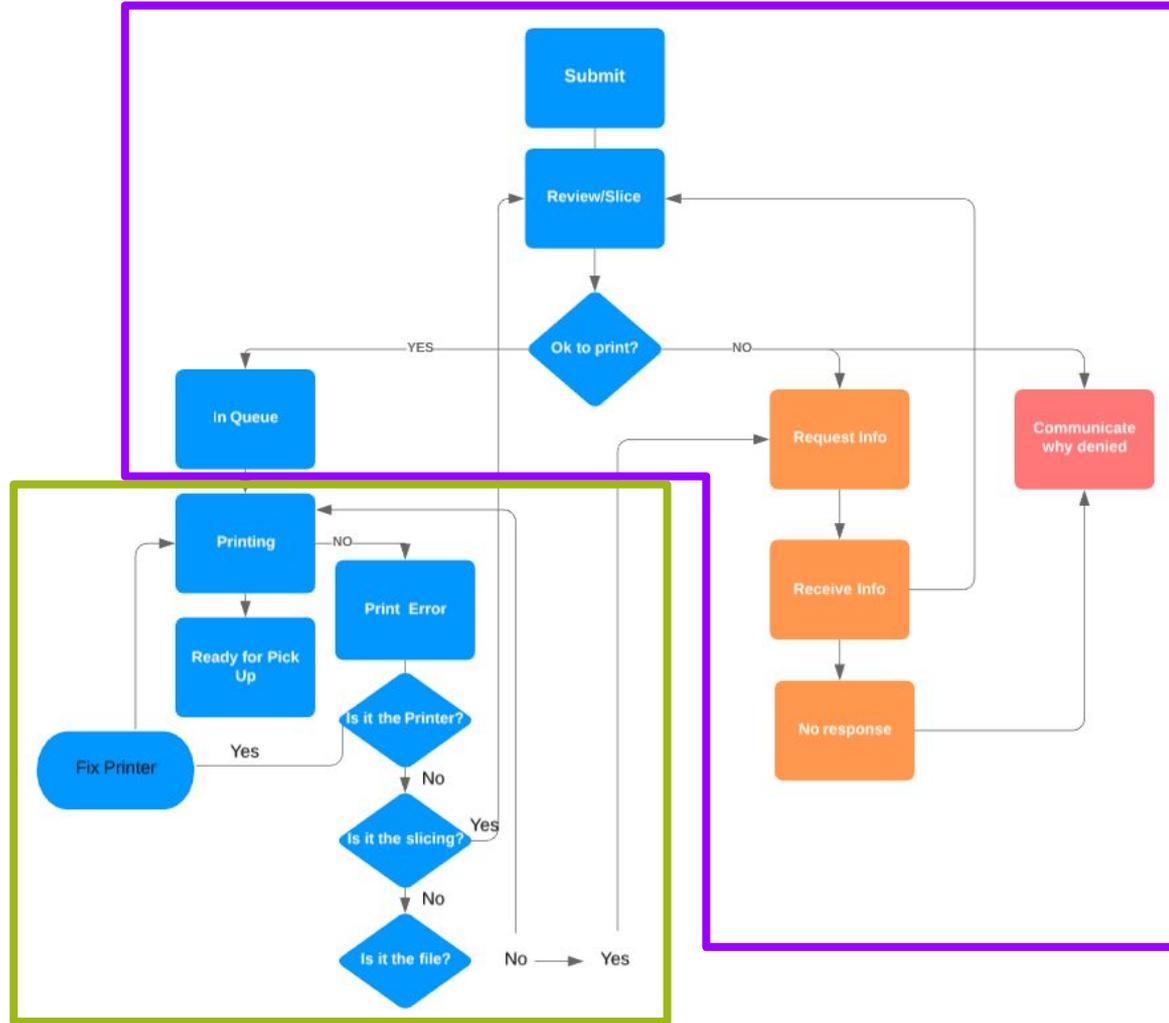
# 2018/19 By Semester

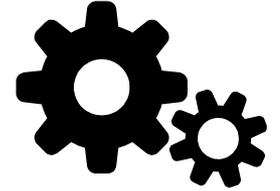


% of print jobs in 2018/2019 submitted by single vs. super users



# Specialization In Workflow

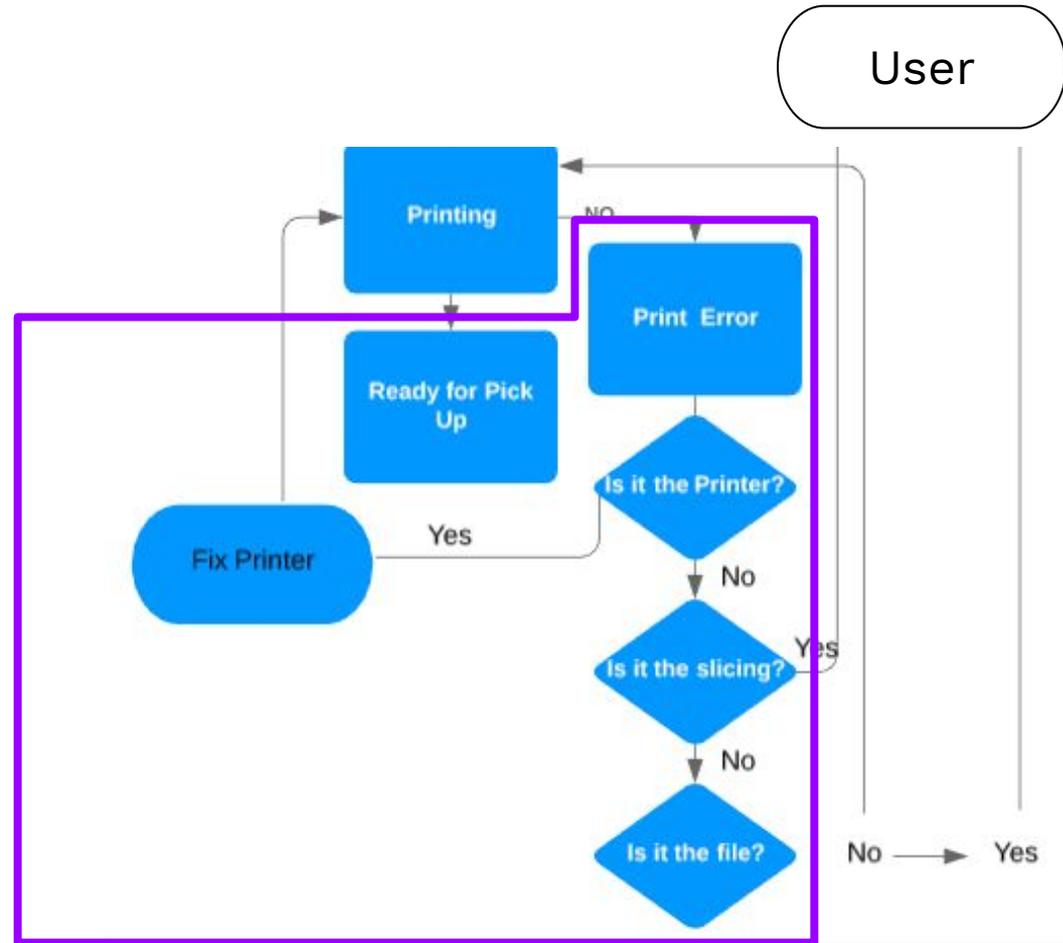




# Direct Access



# Self Serve Pilot



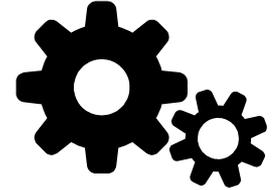
# Lessons Learned



IF WE HAD TO DO IT AGAIN...

# Where we're going





# Resources

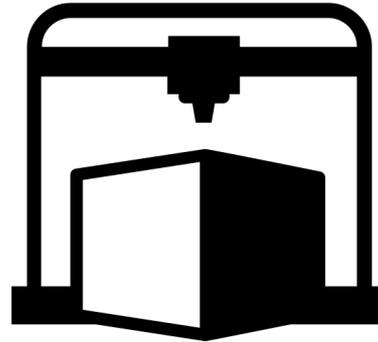
[https://github.com/macewanulib/emerging\\_technology](https://github.com/macewanulib/emerging_technology)

# Thanks!

## Any questions?

You can find us at

- Martina King,  
[kingm10@macewan.ca](mailto:kingm10@macewan.ca)
- Dave Pearson,  
[pearsond@macewan.ca](mailto:pearsond@macewan.ca)



3D printer: Andrew Cameron,  
Noun Project



SlidesCarnival -  
Jacquenetta