

## sdmay19-03: 3D Metal Printer - Phase II

Semester 2 Week 6 Report

March 2nd - March 10th

Client/Advisor: Dr. Bigelow

### Team Members

Thomas Waters — *Computer Engineer*

Ariel Rizhsky-Yakobson — *Computer Engineer*

Jacob Gosse — *Electrical Engineer*

Alvin Rymash — *Electrical Engineer*

Armand Hernandez — *Software Engineer*

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### Summary of Progress this Report

We were able to speak with Dr. Bigelow this week and this helped to make some progress. Multiple parts for the finishing of the printer were completed, including the print and powder beds along with the bracket to make sure that they stay in line. We also got the laser set up and ready to use as soon as we have approval from EH&S.

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### Pending Issues

We are still waiting on some of the parts from the mechanical engineers for the rest of the system which makes it harder for us get more work done. The side panel of the box needs to be made into more of a door.

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### Plans for Upcoming Reporting Period

Our plan for the upcoming week is to first attach all of our completed parts to the printer itself. Once this is done, we will also have to cut insulation for the box to ensure a vacuum seal. We also need to find out a good way to change the side panel into a door.

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### Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Thomas Waters	Updated the bracket for the laser, updated the print and powder beds to allow them to attach to printer.	4	22
Ariel Rizhsky-Yakobson	Worked on setting up the laser and preparing to demonstrate the safety procedure for EH&S.	4	22

Jacob Gosse	Worked with mechanical engineers to make sure parts are being made properly and fit well.	4	22
Alvin Rymash	Continued to manage wires for the sensors and helped to prepare the safety demonstration.	4	22
Armand Hernandez	Continued work on the 3D model slicing and parsing to gcode as well as figuring out how the laser software will work	4	22