



STUDENT SUSTAINABILITY COMMITTEE

Scope Change

From time to time unforeseen challenges or opportunities can affect the planned budget, timeline, or overall goals of a project funded by the Student Sustainability Committee. Past examples of these situations include projects coming in under budget but having additional opportunities available, or inclement weather delaying the planting of agriculture projects.

Below please include a brief project summary and your requested changes. Attach additional documents as needed. If you have any questions, please contact the Student Sustainability Committee at sustainability-committee@illinois.edu.

General Information

Project Name: Additive Manufacturing with Waste

Total Amount Requested from SSC: \$9,800

Contact Information

Applicant Name: Applicant: Efrain Araujo Advisor: Professor Aaron Brakke

Unit/Department: Architecture

Email Address: Applicant: earauj2@illinois.edu Advisor: aaron@illinois.edu

Project Information

Please provide a brief background of the project, the goals, and the desired outcomes:

Please address all of the above items including concrete examples of the desired outcomes

Please provide a brief summary of how students will be involved in the project's changes:

This project seeks to introduce innovative sustainable methods and materials to the 3D printing processes used on campus. 3D printing is now a ubiquitous tool, becoming commonplace in student entrepreneurial and design-focused work for the production of prototypes and design iterations. This project will salvage and recycle waste material already produced on campus through a closed-loop zero-waste system to supplant the use of plastic in these processes. Workshops and trained lab technicians will familiarize the student body with these techniques, instilling in them sustainable sensibilities surrounding fabrication, and enabling their own innovation through the use of open-source kits.

Please provide a brief summary of your requested scope change. How is your request different from your original plan?

Our original time line was:

March 2020 - Material and Binder Testing

April - May 2020 - Prototype testing with different Binders and Material on Zprint

Summer 2020 - Engage Community with Demonstration and Workshops

Fall 2020 - Exhibition and Promotion

New Proposed Timeline:

February - March 2021 - Material and Binder Testing

April - May 2020 - Prototype testing with different Binders and Material on Zprint

Summer 2020 - Engage Community with Demonstration and Workshops

Fall 2020 - Exhibition and Promotion

This new timeline is due to the Covid-19 pandemic. Covid-19 limited the availability for our previous staff to begin research as well as limited our access to on campus facilities. Since Last year we have found new members of our team as well as coordinated with the Fab Lab to establish facilities for our team and students to participate in the research.

Additional comments (Optional)

We plan to continue the research, while we might have experienced several issues along the way we feel we have created a stronger team and have prepared safer and more effective facilities for students and staff to participate in the research during these difficult times.