



3D Printing Network

Three colleges at The University of Alabama are collaborating to keep health care workers on the front-lines of this crisis safe. In response to the critical shortage of personal protective equipment (PPE) during the COVID-19 pandemic, the [College of Community Health Sciences](#), the [Culverhouse College of Business](#) and the [College of Engineering](#) are producing [medical face guards](#) for health care professionals across Alabama.

While 3D printing has become a great alternative for producing PPE for hospitals and health care providers, the demand still outweighs the supply. If you have access to a 3D printer and would like to help in our efforts, we are trying to make it as simple as possible.



The file we are using was originally designed by PRUSA, and received positive feedback from various healthcare providers. We have included an .stl file that allows you to print 4 frames at the same time with the following settings:

- .3mm layer height
- 1mm shell thickness
- 20 % infill

These settings will allow most printers to print 4 frames in approximately 9 hours. Once you print a couple batches of frames, you can deliver them to the cube where we are prepared to handle the rest of the assembly process. We will cut the clear plastic for the face shields and have a team of volunteers available to assemble. We are also in contact with many local healthcare providers and will process distribution.

Alternatively, if you would like to cut your own clear face shield, the .dxf file is attached.

We invite you to join our efforts to offer PPE to healthcare workers at no charge. Participating in this project, you are agreeing that you will not profit from the shields in any way.

Delivery Instructions:

We want to ensure that proper health guidelines are being followed while still allowing the community to help as much as possible. To do this we will stagger drop off times so that no more than one vehicle is dropping off at a time.

Once you have printed a box full of frames, email sam.andrus@ua.edu with the preferred day and time of drop off. Sam will reply to confirm that your requested time slot has not already been taken, after which you can drop your delivery at the front door of H.M. Comer Hall, located at 245 7th Ave. Tuscaloosa, AL 35487. Once you are safely back in your vehicle, we will send someone out to retrieve your parcels. Please make sure you fill out the form below, and tape it to the box so that we can keep track of who is offering assistance!

Delivery Form

Name/company/organization: _____

Date of delivery: _____

Number of frames delivered: _____