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| Author: Kevin Arne Title: Prototyping Labs Supervisor Date: 3/30/2022 | |
| #1 Process  (if applicable) | Additive manufacturing of PLA and TPU |
| #2 Equipment | FDM 3D Printers (Ultimaker 3 Extended and Stratasys F170) |
| #3 Personal Protective Equipment (PPE) | Minimum shop PPE |
| #4 Environmental /  Ventilation controls. | * Maintain the manufacturer’s supplied controls and filter system. * Use the printer in a large, open, well-ventilated place, or exhaust the printer directly outdoors. * Be aware that printing and sanding of finished prints can release nano-particles that are hazardous to health. |
| #5 Required training or approval | * 3D printer training * Review and observe general safety practices outlined in the Shop Equipment Safety Guidelines. * Refer to the manufacturer’s operating manual for all operating procedures. |
| #6 Inspection requirements before use | * Inspect printer and power supply before use |
| #7 Safe operating procedures or precautions | * Don’t touch the nozzle or the heated build plate, as they are extremely hot. * Keep your hands out of the build area when the printer is running. * Supervise the printer for the first 5-10 minutes of your print, to make sure the initial layers are properly bonded. * Wait until your print has cooled to remove it from the bed. This prevents burns and damage to the machine. * Ask a staff member to load/ unload the filament. * If there are any questions regarding safety, ask a staff member for help. |
| #8 Chemicals/ spill procedures/waste disposal | NA |
| Author Signature: Date: | |