How do I use the 3D Powder Printer?

1. General Guidelines

- The use of this 3D Powder Printer is restricted to academic work only. You may not use it for personal projects, work for professional firms, or for academic work outside of Penn Design.
- Students may not operate the 3D Powder Printer. Only trained personnel may operate the 3D Powder Printer.
- Unauthorized use of the 3D Powder Printer will result in immediate suspension of all 3D printing privileges.
- Students may not bring files to the 3D Powder Printer until they have read and agreed to all notices and guidelines in this document.
- Students are expected to maintain a high level of respect for the 3D Printer operator. Disrespect to the operator will result in immediate suspension of all 3D printing privileges.

2. File Creation (Design, Modeling & Format)

- **Students must prep their files correctly, using the Powder Template, prior to submitting their work to the operators. \\juno\Public\DigitalFabrication\3D-Printing-Templates\Power-Template**
- **No extra layers.** Files with layers that do not pertain to the 3D Printing process will not be accepted.
- Files size is limited to 64MB. **No files lager than 64MB will be accepted.**
- Files can be created in Rhino, Maya, 3d Studio Max or SolidWorks.
- **ALL FILES MUST BE EXPORTABLE AS CLOSED zbd, zpr, stl, vrml or ply FILES.** The 3D Powder Printer only recognizes model files in these formats.
- Files must have no open edges.
- **All files must be expressed in inches at a 1:1 scale**
- **Models are limited to a working envelope of 10"width x15"length x8 height"**.
- Students must submit and review their file with the operator prior to printing. All students who have submitted their file to the Powder Printer queue **must supply their Penn Key** as your Penn Key will be used to charge your bursars' account for your 3D print.
- The 3D Printer operator will supply each student with an estimate of the time and cost to print the file.
- **Delete all unnecessary information.**

3. Scheduling your project.

- The Powder Printing queue is posted on the wall in the 3D Printing area of the lab. **You will be entered into the queue once your file is ready and you have supplied your name, Penn Design Login ID (phone and email).**
- Due to the nature of the Powder Printing process, once a project is begun, it must be completed in its entirety.
- Projects will be completed on a **first-come, first-served basis**. **There will be no exceptions.** Please plan accordingly.
- No design changes will be considered after you have reviewed your file with the 3D Printer operator and the file is being printed. **Additional files cannot be added to your current printing time.**
- Students will be allowed to submit additional files for printing only after their name has been "worked off" the queue. The only exception to this rule is that if the printer queue is totally empty, a student may sign up for one additional project.

All scheduling conflicts will be resolved by Dennis Pierattini, not the faculty member or the 3D Printer operator.