

# Vogel Library 3D Printing

Vogel Library strives to offer campus-wide access to new and emerging technologies such as 3D printers to inspire a new interest in design and help our students, faculty and staff bring their creations to life. This policy establishes how and under what circumstances students, faculty and staff may use the 3D printer.

## Printer & Materials

Vogel Library uses a LulzBot® TAZ 6. This printer uses 3 mm PLA filament, a bioplastic made from renewable resources such as corn starch. It is available in a variety of colors, which can be viewed at the ELITE Consultant station in the library. "PLA is commonly used for prototypes, educational and architectural models, and artifact replicas. It can also be treated with a variety of post-processing techniques, [and] it is a popular choice for users looking to paint objects after they have been printed, such as costume props and figurines. PLA is relatively brittle, so it is not recommended for thin, high strength applications." (From the [vendor's website](#).)

## Procedure

### 3D Design Creation

Any 3D drafting software may be used to create a design as long as the file can be saved in .stl file format. Vogel Library suggests [Tinkercad](#), which is a free, online software option.

Ready-to-use digital designs are available at sites such as [Thingiverse](#).

### Submitting a design for printing

1. Read the 3D Printing Policy
2. Load your 3D design onto a USB flash drive.
3. Bring your design to the ELITE station at the front desk.
4. Fill out a 3D Printing Request form, available from an ELITE Consultant.

If your print is time sensitive, please allow adequate time. Most prints will be finished in a few days, but there may be times that the printer is malfunctioning, being repaired, experiencing heavy use, or is being used for an event or a course.

After the file has been printed and the item picked up, or the two week time limit to pick up the item is over, the submitted file will be deleted by library staff.

### Quality

Users may see slight imperfections in their prints. Small bumps or holes and rough edges at the base of an object may occur with 3D printing. You can clean up some of the imperfections with fine sand paper or other tools. The 3D printer is very accurate, but there may be some instances where objects do not fit precisely together.

### How long does it take?

Small projects may take more several hours, complex jobs may take a few days. We will attempt to complete your job within 7 days. The print will be attempted twice before it is declared a fail. At this time, there will be no charge for failed attempts.

(continued)

## Pickup

Patrons will be notified when their print job is completed. Items can be picked up at the front desk.

An ID will be required for picking up prints. Failure to pick up your model within two (2) weeks of completion will result in the model becoming library property.

## Policy

- Use of the library's 3D printer is limited to current students, faculty and staff of Wartburg College.
- The Library's 3D printer may be used only for lawful purposes. It may not be used to create material that is:
  - Prohibited by local, state or federal law.
  - Unsafe, harmful, dangerous or poses an immediate threat to the well-being of others. (Such use may violate the terms of use of the manufacturer.)
  - Obscene or otherwise inappropriate for the library or campus environment.
  - In violation of another's intellectual property rights, or is subject to copyright, patent or trademark protection.
- The Library Reserves the right to refuse any 3D printing request
- Only designated library employees will have hands-on access to the printer.
- Printing is done on a first-come first-served basis taking into account the following priority order: students printing objects for course work, students printing other works, faculty, and staff.
- The library reserves the right to give priority to jobs for various circumstances, including but not limited to:
  - Print time
  - Material
  - Necessity
  - Complexity
  - Staff availability
- The library also reserves the right to alter the size, fill, appearance, or other aspects of models to ensure proper printing.
- Students will be limited to having two (2) models in the printing queue at a time.
- It is sometimes difficult to estimate exact print times. Library staff will make an educated guess about the length of a job upon request.
- Items not picked up after two weeks will become the property of Vogel Library.
- Supervision of the use of the 3D printer by library staff does not constitute knowledge, or acknowledgement, of any unapparent final use of the 3D product, and the library specifically disclaims any knowledge thereof.
- Any questions regarding policy may be directed towards Curtis Brundy or Todd Vandenburg.
- All policies are subject to change over time.

## Q & A

ELITE Consultants are happy to answer your questions about 3D printing and procedures, and to assist you with your projects.

Questions about policies can be directed to Todd Vandenburg, Information Literacy and Technology Librarian; or Curtis Brundy, Library Director.