

Name: Caelin Kuder

Phone Number: 905-541-3432

Office: ETB 303

Supervisor: Dr. Qiyin Fang

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### **Description of Potential Hazards**

#### **Electrical Hazards:**

Devices such as 3D-printers are connected to wall outlets, so they should not be used in or near liquids. Before operating a 3D-printer, check wires and power cords for damage. Ensure walkways are clear of cables that pose tripping hazards.

#### **Heat and Burn Hazards:**

3D-printers have heated extruders and plates that can range in temperature from 140 - 300 degrees Celsius. One can check the user interface to determine the temperature. Ensure that you never touch heated components of the 3D-printer.

#### **Mechanical Hazards:**

Devices such as 3D-printers use motors and belts to move the extruder. One should not reach into the frame of the printer, touch belts, or place hands between the stage and the extruder while the printer is operating. Before operation, ensure nothing will interfere with the movement of the printer.

#### **Radiation Hazards:**

The lab contains lasers which can cause injury ranging in intensity from mild burns to irreversible eye and skin damage. When entering a lab with lasers in use, one should knock on the door and request permission to enter. Ensure that curtains are closed while lasers are being used.

#### **Fire:**

The lab as well as the building have the potential to break out in fire. To prevent fire emergencies, one should complete online fire safety training, locate a fire extinguisher in their work area, and ensure that fire prone equipment is not left unattended. In case of an emergency, refer to emergency procedure.

### **Personal Protective Equipment (PPE)**

Eye protection is required for any lab activity where projectiles or airborne substances are present. Pants and close-toed footwear must also be worn in the lab.

**Emergency Contact Information and Procedure**

In case of an electrical emergency, such as electrical shock, call 88 if you require immediate assistance. Notify your supervisor, as well as EOHSS if an accident or injury report must be completed.

In case of a fire emergency, pull the fire alarm and call 88. Do not investigate the fire - use stairs to exit the building immediately. Wait outside at your designated area, and contact your supervisor and EOHSS as soon as possible.

In case of a radiation emergency, such as laser beam contact with the eyes, call 88 immediately for assistance. Contact your supervisor and the EOHSS Laser Safety Officer as soon as possible.