McIntyre Library Makerspace Proposal

# What is a makerspace?

A makerspace is a place where people come together to create. It contains shared high-tech and low-tech tools and resources. It is a community of experts and novices, sharing ideas and knowledge to inspire the creation of physical items and digital content.

# What is our plan?

* We will renovate a room in the McIntyre Library and purchase furniture
* We will purchase basic and advanced tools that facilitate creation
* We will stock basic materials—offering small quantities at no charge
* We will staff the makerspace with student workers and Library/University faculty/staff when possible.
* We will work with Library/University faculty/staff as well as student groups to hold events and classes
* We will work with University faculty to incorporate makerspace projects into the curriculum
* We will work with students to complete their own personal and class projects

# How do students benefit from a makerspace?

* Opportunity to develop lifelong and marketable skills
* Gain familiarity with state-of-the-art technologies
* Access to tools and expertise for personal and class projects
* A community. Opportunities for social and creative interaction
* Opportunities for collaboration, exploration, and experiential learning
* Prototyping for entrepreneurs/startups

# How does campus benefit from a makerspace?

* It supports our mission to foster creativity in one another
* It provides us with stories of innovation to tell that will be attractive to potential students and donors
* It allows us to be competitive with schools that are already offering these spaces
* Increasing student involvement in extracurricular groups and activities will increase retention
* By providing *all* students with access to technology and resources, a makerspace supports our commitment to equity and inclusivity
* It creates an avenue of success for students who learn best when provided an opportunity for hands-on learning.

# What can you do in a makerspace?

**Sample Projects**

* Lego robot
* Laser-cut and 3D printed art
* Arduino controlled LED cube with a USB interface

**Sample Classes and Events**

* Introduction to 3D modeling
* Make your own guitar effects pedal
* Build an interactive Halloween costume
* Learn Arduino programming
* Balsa wood bridge building competition
* Open source hardware and software: What’s it all about?

# What are we asking for?

**Startup budget**

$20,000 - Renovating space and purchasing furniture

$40,000 - Purchasing equipment

**Ongoing budget**

$16,000 – Staffing/materials/equipment repair

# What do we want to provide with this budget?

**Space**

* Whiteboards
* Projector
* Sink
* 4 work tables, 1 instructor/work table
* Air filtration
* 3 computers

**Equipment**

* Laser cutter
* 3D printer
* 3D scanner
* Fume hood
* Hand tools (screwdrivers, wrenches, etc.)
* Power hand tools (drill/driver, Dremel, etc.)
* Electronics (power supplies, oscilloscope, etc.)
* Fabrics (sewing machines, cutting mats, etc.)
* Crafting (vinyl cutting machine, button maker, etc.)
* Art (paints, easels, etc.)
* Digital Art (Wacom tablet, Adobe software, etc.)
* Audio (podcast recording studio)
* Robotics (Lego Mindstorm)

**Support**

* Regularly scheduled classes and events
* Access to subject experts and equipment training
* Clearinghouse of other related resources on campus