UTSC Sustainability Maker Challenge 2017

University of Toronto
Library
UNIVERSITY OF TORONTO
SCARBOROUGH

Sustainable Development Goals

In September 2015, the United Nations unveiled **17 sustainable development goals**, each with their own set of specific targets to measure progress.

The SDGs succeed the Millennium Development Goals, and the shift represents a global acceptance of the **convergence of development and environmental sustainability**.

This shift is salient for two primary reasons:

1) populations that have yet to reach a critical level of human welfare are already facing the conditions more developed populations fear will result from environmental degradation;

2) many of the ostensibly social goals are in fact critical to addressing environmental problems, and vice versa.

The UN SDGs also underscore the **collaborative nature of sustainability challenges**, a refreshing and necessary antithesis to approaches focused on determining who is more sustainable than who.

Maker Culture

Maker culture is an emerging global phenomenon that one might describe as **do-it-yourself for the 21st century**. It is based on a philosophy that emphasizes **learning-by-doing in a social context**.

Maker culture extends STEM principles and approaches to individuals who may or may not have formal education in these fields. It is also centered around maker spaces, that allow users to engage technologies and each other to solve problems faced in every day life.

The **UTSC Library** sees a lot of promise for maker culture in the university setting, allowing like-minded people from different academic backgrounds come together and collaborate in a social environment.

To that end, the **UTSC Makerspace** has recently been launched inside the Library. Open to students and faculty, the 1,400 sq.ft. facility features a 3D scanner, 3D printers, microcontrollers and other tools.

The Challenge

The **Sustainability Maker Challenge** is a fresh take on a more traditional hackathon. Where hackathons focus on competing to create the best solution to a single problem, our challenge focuses on **collaborating to find multiple solutions to as many of the SDGs as possible**.

The challenge is straightforward, but anything but simple. **Teams of students will:**

1) pick an SDG;
2) create a vision for how maker culture can help make progress toward that goal;
3) make something in the Makerspace that is emblematic of the team vision.

The **challenge will last 10 days over reading week in February**, with full day events on the first and final days.

Leading teams will be invited to work with the Sustainability Office to see how their vision of maker culture's contributions to sustainability can be adapted to the campus context.

Our Ask In order to improve the experience for participating students, we are hoping to identify **faculty and industry mentors** for as many teams as possible. Mentors would be asked to **attend limited portions of the all day events**, and be **available by email** for the remainder of the challenge. Additionally, we are hoping to identify a handful of mentors for **anchor teams** for **departments that have a clear connection to one of the SDGs**. The liaison librarians are helping us coordinate the anchor teams, so please reach out to your liaison librarian if you are interested.

1 NO POVERTY	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	5 GENDER EQUALITY	6 CLEAN WATER AND SANITATION
7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	10 REDUCED INEQUALITIES	11 SUSTAINABLE CITIES AND COMMUNITIES	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION	14 LIFE BELOW WATER	15 LIFE ON LAND	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS	SUSTAINABLE DEVELOPMENT GOALS

Sustainability Office: sustainability@utsc.utoronto.ca ❖ *UTSC Library Makerspace:* utsc.makerspace@utoronto.ca