

2018 TAKE OUR KIDS TO WORK DAY - BREAKOUT SESSIONS

1. EDUCATION PROGRAM IN ANATOMY

Get a glimpse beneath the skin of the human body and discover the internal structure that makes up who we are. Participants will have the opportunity to work with anatomical models and specimens to develop an understanding of anatomy and the organization and systems of the human body.

Please Note: Human cadaveric specimens and models will be used to teach students about the human body. The following will not be permitted within the laboratory space in which the session will be held: food, drink, cameras and cell phones. Please ensure these items are left with the parent/guardian. All students will also be required to wear appropriate gloves, as provided by the Anatomy Program.

2. FACULTY OF ENGINEERING: PACE MAKERS

Bio-medical Engineering

In this workshop, students will use a 555 timer in combination with LED's to illustrate how a pacemaker controls the rhythm of a patient's heart. Students will have a chance to bread board their own components and gain a better understanding of how electrical mechanisms can be used for medical treatments.

Please Note: Student will be required to wear closed toed running shoes, and must tie back any long hair, if applicable.

3. LYONS NEW MEDIA CENTRE

In the Lyons New Media Centre, participants will discover how actors in movies can appear in wild and crazy places with a hands-on workshop using the Centre's green-screen and photo editing software. Join this session for some fun and learn how to transport yourself to another location in pictures!

4. ATHLETE'S EDGE: TRAINING THE MCMASTER WAY

McMaster Athletics and Recreation will offer a session that combines physical activity as well as education, that discusses how to properly train and how athletes fuel their body, concluding with a strength and conditioning session. This session will also include a full tour of the David Braley Athletic Centre facilities.

Please Note: Participants are required to wear active wear clothing (shorts and t-shirt), running shoes, and bring a water bottle for this session. Jeans and tank tops are not allowed.

5. MCMASTER MUSEUM OF ART

At the McMaster Museum of Art, participants will experience the gems of the collection, including significant artists such as Monet and van Gogh. Students will gain an understanding of the incredible variety of skills and talents needed to run a museum. A hands-on session will give participants the opportunity to create their own accordion-style book.

6. MCMASTER MAKER'S SPACE

Located on the lower level of Thode Library, the Makerspace is a joint effort between McMaster University Library and the Faculty of Engineering. It provides a new, interdisciplinary experiential learning space equipped with tools and technology. The McMaster community of students, staff, and instructors gather here to create, invent, prototype, and learn. Use of the Makerspace is governed by a code of conduct. This year's breakout session features an opportunity to appreciate the impact of incorporating our 3D printer, laser cutter/engraver, desktop PCB milling machine, drill press, pedestal grinder, sewing machine, soldering station, hand and power tools, and electronics (Arduino UNO, Raspberry Pi, circuit board, jumper wires, LED lights, resistors and more) into current education and future applications.

Please Note: Student will be required to wear closed toed running shoes, and must tie back any long hair, if applicable.

7. STAR WARS: THE SCIENCE AWAKENS

Is it possible to create a lightsaber? Is the Millennium Falcon really "the fastest hunk of junk in the galaxy?" How much energy would the Death Star require to destroy earth? Can planets like Tatooine and Hoth exist in our Universe? How close are humans from creating robots like R2-D2 and C-3PO? Could the Force ever be a reality? Prepare yourself for a memorable Star Wars experience at the McMaster Planetarium.

8. SPIDER BIOLOGY BLITZ

In this spider biology blitz, students will have their pre-existing knowledge of spider biology (myth and facts) quizzed in an open audience format. Afterwards, students will be challenged to take a walk in the sensory shoes of web-building spiders. Participants will then find out how they'd fare as a spider in the struggle to acquire prey."