2019 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. 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.

6. THE ART OF SEEING

The Art of Seeing™ is a visual art-based program designed to make us better observers by developing greater skills in non-verbal communication, observation and reflection. Held in the unique learning environment of the McMaster Museum of Art, students will learn these skills by learning to look deeply at works of art. This in-gallery program challenges traditional classroom learning by asking students to slow down and take pause, engage with complex and difficult subject matter, while also examining different cultures, histories, and ways of knowing.

7. RADIATION AND RADIOACTIVITY: FROM NUCLEAR POWER TO TREATING CANCER

What is an atom? How do we harness nuclear energy? What really goes on in a nuclear reactor? What is the impact to the environment? Is it safe? How is radiation and radioactivity used in today’s society?

These questions and so much more will be answered when you visit the Nuclear Research Building. Did you know we can use the reactor to help treat cancer? Or that nuclear energy is very safe and clean? Come interact with Nuclear Research Scientists and Health Physicists. You can try using a Geiger counter to identify actual radioactive samples. Take a virtual tour of the Nuclear Reactor, Canada’s largest research reactor!

8. THE BUSINESS OF ENGINEERING

Engineering is a field that involves inventing, designing, and building things to solve problems and achieve practical goals. However, these solutions have to be cost effective and the Engineering & Management program prepares our engineering students for this fact of life. Participants will gain insight into basic project management and learn about the business side of engineering. They can then test their mettle in a gameshow format that will require intuition, organization and creativity.

9. INDIGENOUS STUDIES PROGRAM

Since its inception the Indigenous Studies Program (ISP), currently located in LR Wilson Hall, incorporates a very unique teaching structure of Indigenous knowledge which involves many Native peoples and Elders. This experientially engaging perspective assists all students from various cultures and background in learning about the history and lives of Aboriginal people within an Indigenous perspective. During this year’s breakout session, students will tour the Student Library offering hundreds of books, articles, DVDs, and CDs related to Indigenous knowledge and issues; Student Lounge; Ceremonial Space that incorporates studying, meeting, and event hosting, as well as the Medicine Garden. Students will also be able to participate in making Indigenous crafts.
10. ARCHAEOLOGY LAB

The Archaeology Teaching Lab is equipped with state-of-the-art audio visual aids to facilitate teaching and student presentations, as well as all the necessary equipment required for analytical procedures in archaeology. This lab is furnished with display cases that demonstrate the archaeological process and highlight artifacts from the department’s archaeological research collections. Students will work with real stone tools, ceramics, and animal bone to learn some of the techniques archaeologists use to interpret people of the past.

11. STUDENT WELLNESS CENTRE

This session will focus around the well-being of grade nine students. Students will explore and discuss concepts related to mental health, wellness, and self-care techniques with peer educators from the Student Wellness Centre. Students will get to participate in an art therapy activity involving colouring and listening to calming music as well as engage in a mindfulness session to evoke self-care techniques. Sign up for this session to learn about wellness and engage in a relaxation session.