2023 University of Guelph Battle STEM



Event Title	Junior/Senior/Both	Event Description
All Things Science Scavenger Hunt	Junior & Senior	Hunt for QR codes revealing science questions scattered around campus. Provide answers to score points for the win!
How to Be a Statistical Detective!	Senior	Mark Twain famously once said, "There are three kinds of lies: lies, damned lies and statistics." People tend to view statistics with a bit of skepticism, recognizing that figures can be compiled and presented in any number of ways to support a particular argument. Statistical studies are extremely important in our everyday life. Statistics keep us informed about, what is happening in the world around us. Today we live in the information world and much of this information's are determined mathematically by statistics. Some major areas relying on statistics include government, education, medicine, science, and large companies. Always think about the benefits and risk of using statistics. Test your statistical intuition in U of G's greatest race! Students will answer questions. No statistical experience required.
Food Sensory Perception	Senior	Investigate how the olfactory and gustatory systems work together and challenge your knowledge of food chemistry. Use your senses to learn about food perception and how that influences the food experience and product development.
One Health	Junior & Senior	The concept of One Health is founded on three pillars - human health, animal/plant health and ecosystem health - and the premise that health in any one pillar cannot be viewed in isolation; rather that lasting solutions to health challenges can only be achieved by considering them in concert. Are you up to the challenge?
Gryphon Gladiatorial Mathematics	Junior & Senior	Groups of students will tackle multiple choice problems with time limits, squaring off against other groups. Some problems will require individuals to come forward and test their mental math capabilities, while others will get groups to try their best to outthink other groups: The "right answers" may depend on the answers that other groups give! No calculators but we'll have some backup pencils and paper to go around.
All About Trees	Junior & Senior	Ever find yourself lost in a sea of green? Well let's get rid of any plant blindness you may have by getting to know Ontario Native Trees a bit better.
Great Spy Race	Junior	Use GIS techniques to uncover the hidden message! Geographic Information Systems is an umbrella term for a series of tools and techniques for storing, analyzing, and visualizing spatial data. Geographers use these tools to learn more about the environment around us, to determine information/knowledge that is not obvious at first appearance. For this activity, you will apply a GIS to explore some data, and observe the ways the university campus has changed over time.
Great Solar Hunt	Senior	Use GIS techniques to uncover the hidden message! Geographic Information Systems is an umbrella term for a series of tools and

		techniques for storing, analyzing, and visualizing spatial data. Geographers use these tools to learn more about the environment around us, to determine information/knowledge that is not obvious at first appearance. For example, where are the best locations to harness renewable energy? For this activity, you will apply a few GIS tools to analyze some data for a portion of Guelph, ON, in order to uncover a hidden message in the data: Where should we install rooftop solar cells?
BioBlast	Junior & Senior	Beat the clock while completing challenging biology lab exercises. Matching skulls, identifying structures on pre-
		dissected organisms, and answering questions about the
		animals, plants and invertebrates in our collections will all be
		part of this exciting fast-paced event!
Titration Nation	Junior	Students will complete in chemistry themed knowledge-based games.
Titration Nation	Senior	Students will compete in a wet lab format. Students will need to be prepared to be in a Chemistry lab so must wear close-toed shoes.
Food Function Feud	Junior & Senior	This activity will require students to investigate the effect of some food ingredients, and then use that information to select the best ingredient for the mystery job.
LightBot	Junior & Senior	Guide a robot through a maze that gets more complicated as you
		progress! No previous coding or programming experience
Creative Encounters' - Rockin' Rocketeers!	Junior & Senior	required. Students will take part in a stomp rocket building challenge that will test their knowledge of physics and engineering! Get ready to use your creativity and skills to launch your cargo rocket to infinity and beyond!
Battery Builders	Junior & Senior	Students will be tasked with building a galvanic battery using a variety of provided mediums and materials! Get ready to shock us with your knowledge of electrical engineering and chemistry; highest generated voltage wins! (School of Engineering - as presented by Creative Encounters)

We hope to add more events and will post updates when available.