

<https://docs.google.com/document/d/1FpyARPorTxoWQRYwVYqLmstSHvAHRQqxnJ7cMc7FQZ8/edit?usp=sharing>

<http://visit.gaston.edu/scivisit>

Here are your reservations:

Chromatography – **9 am** (up to 24 students) group 3 full

Outbreak – **9:30 am** (up to 40 students) **Half full- group 2-Chaperon=Lewis**

The Effect of pH on Pucker Power – **10 am** (up to 15 students) group 4- full

Who Killed Mr. Smith – **11 am** (up to 15 students) **Full - Group 1 - Chaperon= Pons**

Group one

Mandatory= 11 am Who Killed Mr. Smith

Will rotate in and out of 4 of these:

Heath and Fitness Challenge

Extreme Fruit Ninja

Brains

Rocket Cars

Balloon Rockets

Hydrogen Balloons

Neuromyths

Digging for chocolate

Group two

Mandatory= 9:30 Outbreak

Will rotate in and out of

Here are all the activity descriptions:

Scheduled Sessions:

(Offered at 9 am, 9:30 am, 10 am, 11 am, and 11:30 am; at 10:30 am, there will be a group session for all in the South Quad)

The Effect of Hydrogen on Pucker Power

Eating candy in the name of science? Yes! In this investigation students will learn the effects hydronium and hydroxide concentrations in solution, make connections to the acid/base chemistry behind the taste of sour and test to see if their pucker can be used as an accurate measure of pH. The true pH values of the candies will be determined using electronic pH sensors. This event will be held in the BioNetwork Mobile Lab near the Rauch Building.

The Science of Beauty

Gaston College Esthetics students will perform a hand massage on participants followed by a paraffin wax treatment by Cosmetology students. Come learn the science of relaxation! This event will be in room 240 of the Robinson Classroom Building.

Who Killed Mr. Smith?

Students will investigate a mock murder scene in “Who Killed Mr. Smith. Students will take notes, collect evidence, and draw conclusions to the murder. During this time, students will have the opportunity to speak with actual detectives and crime scene officers and learn some of the techniques used in conducting and processing the crime scene. This activity will be held in the room 126A of the Robinson Building.

Technology and Careers in Policing

Students will be able to see some of the technology that is used in special units within policing. This will include bomb disposal, K9, and SWAT. Short demonstrations will be presented to the students. In addition the students will have the opportunity to talk to various police officers about special units and what it takes to join them. This activity will be held in the room 126B of the Robinson Building.

Health and Fitness Challenge!

The Health and Fitness Science Program will provide fun, physical activities and challenges to prospective students. Students will have the challenge of performing the vertical jump and broad jump tests. These fitness tests measure total explosive power. This activity will be held outside in the South Quad. In the event of rain, this event will be held in the breezeway of the Myers Building.

Neuromyths: BUSTED!

There are many widespread myths about the brain. In this workshop, we'll discuss some of the most common myths about the brain and find out the truth about the brain. This activity will be held in room 341 of the Robinson Building.

Who Is Watching Your Bits and Bytes?

The Information Technology Department will conduct simultaneous, interactive activities for prospective students, each lasting about 5-10 minutes, created and executed by current security and networking students. These activities will demonstrate operation of Axis security cameras, packet capture using WireShark, using Calyptix firewalls to control access to your network, Trixbox open source PBX software phone systems, VMware virtual computing software, password guessing, and honeypots. This event will be held in room 106 the CET Building.

Learn Biotechnology Basics!

Explore the field of biotechnology through use of some basic tools of the trade. This event will be held in room 242 of the Rauch Building.

Wonders of Chemistry

Chromatography is a means of separating the components of mixtures. In this experiment, the food dyes used to create the color of "grape" soda will be separated into the basic components. This event will be held in rooms 233 and 237 of the Rauch Building (concurrent sessions).

A Walk in the Woods

Join Gaston College Science faculty for an exploration of our local forest ecosystem. Come dressed to take a walk in the woods and discover the plants and animals that make their home on campus. Learn about how organisms adapt to the environment, the differences between native and non-native plants, and the names of species you can find in your own backyard. Walking tours will leave from the lobby of the Rauch Building every hour, rain or shine (this activity will take 40-45 minutes).

Outbreak!

Come explore how germs are spread from person-to-person in this simulation of disease transmission. How quickly can diseases spread? Come find out in this interactive activity! This event will be held in rooms 335, 336, and 337 of the Robinson Building (three concurrent sessions).

Eye See You!

Come explore the anatomy and physiology of vision as we dissect eyeballs and explore how we use our eyes to see the world around us. This event will be held in rooms 139 and 142 of the Rauch Building (concurrent sessions).

Creation Station

Discover your inner architect or engineering! In Creation Station, we invite participants to build their own creations from the ground up. In particular, we are hoping our visitors can build

Gaston College a mascot for the annual sciVisit event. This event will be held in rooms 237 and 238 of the Robinson Building (concurrent sessions).

Torque Me Up

What do doors, see-saws, and crow bars have in common? They all rely on the physical principle of torque. Through demonstrations and activities we'll learn about the definition of torque, and how it is used to lift, rotate and balance objects. This event will be held on the second floor of the Morris Library.

Broadcasting!

Come and explore the technology of television production. Visit a working production facility and try your hand at the camera! This event will be held in room 117 of the Craig Building.

Veterinary Medical Technology

Work with your hands. Work with your mind. Work with your heart. Come explore the field of veterinary technology! This event will be held in room 242 of the Robinson Building.

Animalcule: Life in a Drop of Water

Come be amazed by the hundreds of microscopic organisms that can be found in a drop of pond water. Be ready to use a microscope and explore the different types of organisms including diatoms, rotifers, Daphnia, and many others. This activity will be held in room 245 of the Rauch Building.

Geothermal Exploration

Participants will examine surface area and heat transfer, then design their own models to demonstrate the use of geothermal energy. This activity will be held in room 111 of the Rauch Building.

Balloon Rockets

Newton's Third Law of Motion takes off as design teams launch balloon-powered rockets to explore the forces behind the movement. Participants will use their imagination and problem-solving skills to create the winning rocket. This activity will be held in rooms 204 and 205 of the Rauch Building (concurrent sessions).

Rocket Cars

Race to the finish line while exploring Newton's Laws of Motion! Teams will build and test a prototype car and explore how changes to wheels, body, or balloon will alter car performance. This activity will be held in rooms 129 and 132 of the Robinson Building.

Blood Splatter Analysis

Trigonometry is used in many professions, including forensics. One such situation is the analysis of blood splatter during a crime scene analysis. Where did the bullet come from? Students will get a hands-on lesson in using trigonometry to determine direction of a bullet given some blood splatter. This activity will be held in room 130 of the Robinson Building.

Digging for Chocolate

Learn about different mining techniques by extracting chocolate chips from cookies! Which technique is the most profitable? Which technique has the least environmental impact? Come dig for chocolate and find out! This event will be held in room 338 of the Robinson Building.

Blood Typing

In this activity, participants will learn about blood typing and how it can be used in the field of forensics. This activity will be held in room 131 of the Robinson Building.

BRAAAAAAINS

Assume the role of a mad scientist as we surgically modify normal brains into zombie brains.

This event will be held in room 130 of the Rauch Building.

Don't Let Your Snack Attack!

In this interactive session, participants will analyze and compare the nutrients in common snacks and drinks. Is the nutritional value of your snack fooling you? Come find out in this session! This event will be held in room 206 of the Rauch Building.

Simulations in Nursing

Come experience a few of the simulations that our own nursing students enjoy such as an operating room setting with surgical attire and props, listening to heart and lung sounds on a talking and breathing manikin, and experimenting with tuning forks, reflex hammer, ball joint replacements, brain, and more. This activity will be held in room 216 of the David Belk Cannon Building.

English and STEM Combined: Logic, Scholarly Publications, and STEAM

The Hunger Games and Genetically Modified Organisms (GMOs)

Explore genetically modified organisms (GMO) in the books and movies of The Hunger Games, in addition to a brief description of what GMOs actually are and how they are used in the real world. Participants will also work in groups to discuss the ethical issues surrounding the use of GMOs. This event will be held in room 236 of the Robinson Building.

Neurotransmitter Superheroes!

Neurotransmitter superheroes will feature the characteristics of glutamate, dopamine, acetylcholine, GABA, serotonin, norepinephrine, or endogenous opioids. Students will

incorporate the functions of their chosen neurotransmitter and create a persona and body for a superhero. This event will be held in room 128 of the Robinson Building.

Continuous Activities

(These sessions are offered continuously throughout the day with no defined start or end time):

Advanced Technologies: Meeting People's Needs!

The E&IT division will have multiple displays covering architecture to utilities. GIS and GPS, air conditioners and robots, auto parts and welding machines, computers and processors, and solar panels to nuclear power plants! See how science and math concepts are put to work, helping people reach their goals. This event will be held in the Myers Auditorium, Sections A and B.

Patient Simulators!

The Department for Emergency Medical Science Education will be demonstrating treatment of a simulated patient in our state of the art ambulance. This event will be held outdoors near the welcome stations. In the event of rain, this event will be held in the 2nd Floor Hallway of the Rauch Building.

Hydrogen Balloons

What is in that balloon? Come find out in this explosive activity! This event will be held outdoors in the South Quad. In the event of rain, this event will be held in room 105 of the Rauch Building.

Extreme Fruit Ninja

Use liquid nitrogen to transform fruit and other objects in this shattering experience. This event will be held outdoors in the South Quad. In the event of rain, this event will be held in the 1st Floor Lobby of the Rauch Building.

Heterodonty in Mammals

What your teeth are really for? Why are your teeth different from those of other mammals?

What are "baby teeth" all about? Would you like to find out? Come explore the world of mammalian teeth, and discover the purpose behind our heterodonty, or "different teeth!" This activity will be held outdoors in the South Quad. In the event of rain, this event will be held in the second floor lobby of the Rauch Building.

Research That Rocks!

Did you realize that psychological research could be so much fun? Gaston College students will provide you with a variety of opportunities to participate in fun and thought provoking studies.

Can color impact your sense of taste? Does your personality affect what kind of music that you like? How well could you play corn hole if you wore glasses that alter your vision to that of someone who is intoxicated? Does color affect your memory? Come join us as we explore how things impact our perceptions, thinking and behavior! This event will be held outdoors in the South Quad. In the event of rain, this event will be held in the Myers Auditorium, section C