

March 25, 2023 12:00-4:00 pm

# STEM

## Science Hall — First Floor

**104 Constructing A Mobius Strip** — *WVU -Potomac State College, Mathematics*

Construct Mobius strips from cash register tape and learn about their properties.

**104 Geology Challenge** — *Seneca Rocks Discovery Center*

Identify types of rock using clues based on observation.

**108 You and Your Health** — *WVU School of Pharmacy Patient Care Operations*

Explore health topics and receive point-of-care health screenings.

**108 Jeopardy, Brain Dissection, and Dentistry: OH MY!** — *AHEC West*

Come enjoy a round of Jeopardy! You will guess how much sugar is in a soda, energy drink and juice! Dissect brain Jello! Explore health Occupations!

**109 Make Your Own Binary Jewelry** — *WVU -Potomac State College, Computer Information Systems*

Create a piece of jewelry with your name spelled in binary code.

**109 Microscopic Fun** — *Allegany College of Maryland, Career & Technical Education and Medical Lab Technology*

Learn proper technique to view tiny wonders under a microscope.

**116 The Wonders of Water** — *Evergreen Heritage Center*

Enjoy Project WET's- Water Wonder and Water Olympics during this year's Festival in this hands-on activity for your family water enthusiasts!

**116 SUGO Robotics** — *4-H Rambunctious Robotics*

Robots duke it out trying to knock each other off the ring using sensors and autonomous programming. Add on attachments and see how the robots react!

**117 Project Investigate: Methods of Latent Fingerprint Development** — *Garrett County Sheriff's Office*

Try out different hands on development techniques and learn what elements affect latent print processing.

**120 Cells: Exploring the Most Basic Unit of Life Using a Microscope** — *Allegany College of Maryland*

From the simplest bacteria and amoebas to the most complex plants and animals, all living things are made up of one or more cells. You will use a microscope to examine cells from various organisms.

**Restrooms are available at the following locations.**

**Science Hall-**

at each end of first floor and second floor hallways

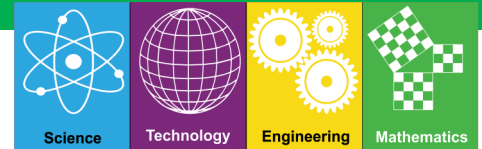
**Davis Conference Center-**

side hallways through the glass doors on each side of at the top of the steps

**Lunch foods for purchase are available at**

**Davis Conference Center  
(PSC Dining Services)**

**Student Union (Fox's Pizza)**



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## Science Hall— Second Floor

### **204 Glove Up-It's Time for Operation (Game) — Potomac Valley Hospital**

Learn about prepping for operation! Glove up using sterile technique. Then join the game!

### **205 The A-Team Robotics — Allegany High School**

High school robotics team will demo competition robot and tell you about the FIRST Tech Challenge.

### **209-Create your own Robotic Hand — WVU -Potomac State College, PSC Biology Dept and Students**

Explore how your hand moves as you create a robotic hand out of paper, string, and straws.

### **209- Mixing Compound Medications (with CANDY!) —Potomac Valley Hospital**

Let's make a medication solution that tastes like candy! Using a mortar and pestle, participants will grind candy and add it to water premeasured with a graduated cylinder.

### **211-Hands On Anatomy and Physiology — WVU -Potomac State College, PSC Biology Dept and Students**

Have you ever wondered what the inside of your body looks like or how the various organs work or why smoking is bad for your lungs? Join us to investigate.

### **219 Wetland in a Pan — Canaan Valley National Wildlife Refuge**

Learn why the wetland habitat is crucial for humans and wildlife alike, as we demonstrate wetland function and how we use monitoring tools.

## Science Hall — Ground Floor

### **G6 Interactive Watershed Model and Stream Cleaner Pinball — Cacapon Institute**

Let's explore pollution in our watershed with a model town. Then clean up pollution with our Stream Cleaner pinball machine!

### **Science Conference Room Bee a Pollinator! — Mineral County Girl Scouts**

Learn how the movement of pollen by insects leads to fruit, vegetables, and more flowers.

### **Science Conference Room Feed the Insects: Make Seed Bombs —Mineral County Master Gardeners**

Learn more about pollination and make seed bombs to take home.

### **Hallway Leave No Trace — WVYEP**

Learn and practice the 7 Principles of Leave no Trace! Play games and learn how to leave the outdoors better than before and build a yummy edible candy fire.



## The “Quad” (Outdoors)

**Fun Engineering Projects** — *WVU-Potomac State College*, Engineering Department and students  
Potomac State College Engineering students show off their FUN course projects!

**Soil Tunnel Trailer** — *West Virginia Conservation Agency*

What lurks below the soil surface? Living organisms, organic matter, minerals, and more. See it in 3D!

**The Impact of an Emergency Medical Services (EMS) Physician Program in Rural WV** —

*WVU EMS Physician Response Program (WVEMSP)*

Learn about the new subspecialty of EMS Physician Board certification and the impact of EMS physicians in rural areas. Hands-on experience of EMS physician skills will be provided.



## Lough Gymnasium

**Moorefield JackBots Robotics**

Moorefield’s FIRST Robotics teams will showcase their robots.

**WVU Science Behind the Sport** — *WVU Science Behind the Sport*

Which outdoor adventure sport produces the most power? Stop by our WVU Science Behind the Sport display to explore work, power, and energy and put your muscles to the test!

**Marshmallow Catapults** — *Mineral County 4-H*

Build your own marshmallow catapult and learn about the engineering concepts behind the build. Practice launching for maximum thrust (mechanical force) and distance traveled by the marshmallow. Take-home 4-H STEM kits for other projects provided.

**WV Dairy Princess Helen McCarty** Learn about WV dairy farms, dairy products, and butter making.

**SuGO=LEGO Summo Wrestling Robots!** — *GEARS & G-FORCE FTC Robotic Team 2818*

Step up and choose your Sumo LEGO (SuGO) robot. Whose SuGO bot will be the last one in the ring? Best out of three - all ages love SuGO!

**Wind Power** — *GEARS & G-FORCE FTC Robotic Team 2818*

Use your STEM knowledge to select the set of windmill blades that will win the power race! Select the blades based on different number, angle, or length of blades.

**STARLAB (by NASA)** — *New Creek Primary*

Participants will learn about the galaxy around us by walking through the STARLAB dome.

**NOTE:** Presentations will start every half hour and have a capacity of 20 people per session.

**The Brown Cow Chow Down!** — *WVU-Potomac State College*, Agriculture and Forestry Departments

Watch as Eugene the Mechanical Cow eats bucket after bucket of feed and turns it into energy!



## Student Union

### **Exploring Forest Health in West Virginia** — *West Virginia Department of Agriculture*

Examine both live and mounted specimens of many insects found in WV and learn how we can work together to keep WV's forests healthy and productive.

### **Spin Wheel** — *Mountain Laurel Medical Center*

Children and adults will spin a prize wheel and answer a health-related question in order to win a prize. Participate in blood pressure screening.

### **Pollinator Game** — *Appalachian Forest National Heritage Area*

Learn how pollinators help plant reproduction with this interactive pollinator game and win your own native wild-flower seed packets!

### **SAM - Underwater Remotely Operated Vehicle (ROV)** — *GEARS & G-FORCE FTC Robotic Team 2818*

SAM is an underwater Remotely Operated Vehicle (ROV) that introduces a range of marine STEM concepts such as buoyancy, thrust, stability and waterproof robots. Fly a SAM in a water-tank and collect oysters.

### **3D Printing** — *WVU-Potomac State College, Math Dept with Student Tanner Robey*

Explore the design and manufacture of a small parts using a 3D printer. This printer has created items such as a card launcher which uses a microprocessor, an infrared sensor, and a servo motor.



## Shipper Library

### **Paleo-palooza! See and Touch Real Fossils and Bones** — *WVU-Potomac State College, Mary F. Shipper Library*

Come visit natural history exhibits of fossil and recent life that you can see and touch. Experts from local colleges, the National Park Service, and more will be on-hand to answer your fossil questions or have info on careers in paleontology.

### **The Endangered Appalachian Grizzled Skippers and other Pollinator of West Virginia** — *US Forest Service*

Explore a 3D printed display of different kinds of butterflies and host plants as well as an interactive diorama.

### **Unbe-LEAF-able Art: Learn to Paint with Natural Pigments** — *WVU-PSC and Keyser-Mineral County Public Library*

Explore the world of natural pigments by painting with crushed leaves during this educational art experience. Each participant will get to take home their own unique chlorophyll masterpiece.

### **Tree Cookies: Growing with Age --Dendrochronology and Forest Products** — *West Virginia State University-Extension*

How old is that tree? Explore its age with tree cookies (cross-sectional area) rings and tree cores.