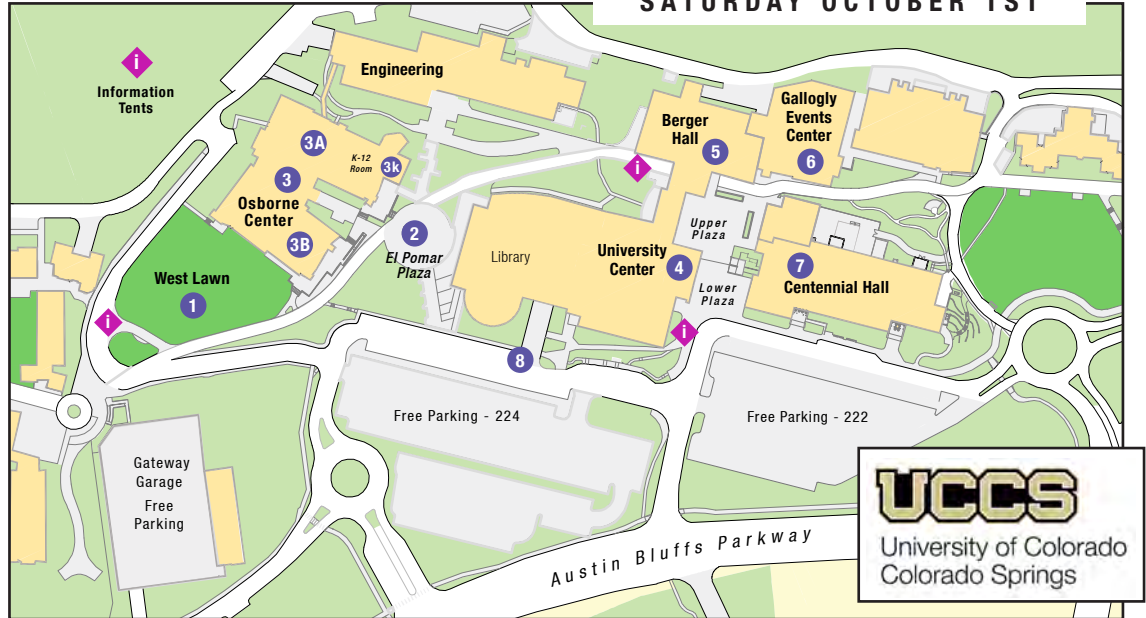


# 2022 Cool Science Festival CARNIVAL DAY!

SATURDAY OCTOBER 1ST



## 1. WEST LAWN

**Southeast Colorado Renewable Energy Society (SECRES)**  
Generate solar electricity and cook S'Mores in a solar oven.

**Cheyenne Mountain Zoo**  
Meet some of your favorite zoo animals (10am - 2pm only).

**School District 49**  
Experience augmented reality (AR) inside our IGNITE Expeditions Mobile Learning Lab bus!

**The Mobile Earth and Space Observatory**  
An Earth and space science center on wheels with telescopes, augmented reality sandbox and more!

**Colorado Springs Fire Department**  
See a real hazardous materials safety vehicle and meet the HAZMAT team.

**Colorado Springs Cadet Squadron - Civil Air Patrol**  
Build a paper rocket and launch it 300 feet with compressed air!

**Colorado Springs Utilities**  
Have a drink at our water trailer.

**CaveSim**  
Practice vertical cave exploration on our caving tower with harnesses and pulleys.

## 2. EL POMAR PLAZA

**AIAA Rocky Mountain Section**  
Become a rocket scientist with water pressure and Alka-Seltzer rockets.

**Colorado Springs Astronomical Society**  
Observe Earth's closest star (*aka our own sun*) with special high power solar telescopes.

**OptTek Systems**  
Engineer the biggest box you can from a single piece a paper and learn how to guess a random number.

**Rocky Mountain Vibes Baseball**  
Breaking down baseball - it's more than just balls and bats!

**Yeet 3D LLC Drones and 3D Printers**  
REALLY loud and REALLY fast racing drones and 3D printers.

## 3. OSBORNE CENTER

### - OUTSIDE ENTRANCE

**Space Foundation**  
Control Sphero Bolt robots to paint and drive under water.

**Cave of the Winds**  
Learn how some caves and rocks form with our Geology Lab.

**North Cheyenne Cañon Park**  
Learn about geology by making a granite chip cookie.

**UCCS Museum of Natural History**  
See specimens of mammal skins, skulls and skeletons.

### OSBORNE - 2ND FLOOR

**Department of Physics and Energy Science**  
Learn how the giant pendulum works and what it tells us about the Earth.

**Pikes Peak Regional Science and Engineering Fair**  
Learn how to make an awesome science fair project from winning students.

**Planet Walk Colorado Springs**  
Learn about our solar system.

**Estes Rockets**  
Build and launch a straw rocket.

### A210 - SHOW

#### UCCS Computer Science Bioinformatics Lab

Learn how Artificial Intelligence (AI) may be used to reconstruct the human genome and how the chromosomes and genome fold within the cell to impact gene expression.

*Middle-High School Students, Adults.  
Shows at 11:30am, 12:30 & 1:30pm*

**A206 - Zometool Inc.**  
Learn about multi-dimensional space and build incredibly beautiful models!

**A208 - UCCS Advanced Manufacturing Laboratory**  
Using 3D printers to make rocket propellant pastes.

**A218- UCCS American Society of Mechanical Engineers**  
Learn a little computer aided design (CAD) in our lab.

**B213 - Nature and Wildlife Discovery Center**  
Learn about hawks, owls, falcons and vultures as you meet them up close and personal.

**B215 - United States Air Force Academy Computer Science**  
Meet our Life-like Humanoid Robots (*Pepper, Furhat, and Misty*) and Learn How They Work

**B216- Civil Air Patrol, Pikes Peak Composite Squadron**  
Learn about air pressure by making paper airplanes and blowing up giant balloons.

### OSBORNE - 3RD FLOOR

**Beth-El Johnson Simulation Learning Center (UCCS)**  
Save the life of our child manikin and drive a tele-health robot.

**American Numismatic Association - The Money Museum**  
Learn how real money is made and guess which coin is heaviest.

**Academy for Advanced & Creative Learning**  
Newton's Color Wheel & Code Breaking with Sieve of Eratosthenes.

**A306 - UCCS American Institute of Aeronautics and Astronautics**  
Tour our machine shop and see our CubeSats, a rocket engine model and a wind tunnel.

**B314 - UCCS Bug Club Insectapalooza!** Meet live and preserved spiders, bugs and other critters and feed them.

### OSBORNE 3K - 3RD FLOOR

(Use NE Corner Stairs from 2nd Floor)

**Colorado Rocket Society (COSROCS)**  
Build a real Estes model rocket with help from our rocket scientists.

**One Voice 4 Change**  
See how students design payloads for CubeSat Sims to launch on high altitude balloons.

**UCCS STEM Education Outreach - Pre-Collegiate Department**  
Soap bubbles- big and small!  
Make your own bubble wand and build a candy catapult!

### 3RD FLOOR - OUTSIDE DECK

**UCCS Hyperloop**  
Amazing hand-held and railway vehicle levitation.

### OSBORNE - 4TH FLOOR

**UCCS Anthropology Club**  
Dig in to the past to find artifacts in a sifting station.

**UCCS Global Medical Brigades**  
Learn basic First Aid techniques we use when we volunteer at home and around the world.

**Pikes Peak State College**  
Build ping pong ball launchers and mousetrap cars.

**UCCS BioFrontiers Center**  
Tour our lab to visualize nanoscale science, experience the exciting quantum world and meet our "Quantum Demon" to learn some funny quantum tricks!

**B402**

**UCCS Museum of Natural History**  
See 800 specimens of mammal skins, skulls and skeletons.

**ENGINEERING 230**  
(VIA OSBORNE 4TH FLOOR BRIDGE)

**UCCS Electrical and Computer Engineering**  
UCCS student Arduino projects and Lego robots.

**4. UNIVERSITY CENTER**  
**2ND FLOOR**

**Harrison School District 3**  
Use math and coding to bring a Star Wars robot to life!

**Autism Vision of Colorado**  
Make your own dinosaur tracks fossil.

**US Environmental Protection Agency**  
Play fun games to learn about protecting our environment.

**El Paso County Nature Centers**  
The tiny and big creatures of El Paso County.

**UCCS Cognitive Development Lab**  
Play a game to discover how you remember visual and verbal information.

**Children's Hospital Colorado - Colorado Springs**  
Make a stress ball to keep calm and breathe.

**Rocky Mountain Dinosaur Resource Center**  
See Dinosaurs of the amazing prehistoric seas.

**Bird Conservancy of the Rockies**  
Learn to identify birds using binoculars and bird guides.

**Pueblo Zoo**  
Learn how to support our songbirds.

**Gather Food Studio & SEE**  
Experiment with your taste buds and change the flavors of foods by combining different ingredients.

**UPPER PLAZA - OUTSIDE**  
**Colorado Parks and Wildlife**  
Meet live fish from Fountain Creek in our aquariums.



[www.coolscience.org](http://www.coolscience.org)

The Cool Science Festival continues thru Oct. 9th with many more cool events - fun for all ages!

**UCCS Chemistry and Biochemistry**  
Experiment with the enzymes in your own saliva that help break down the food you eat.

**Pikes Peak Soap Box Derby**  
Ride in a real Soap Box Derby car!

**UPPER PLAZA - SHOWS**

**Eddie Goldstein**

World-famous science performer and magician, Eddie Goldstein, combines math and science for a totally fun blend of science demos, intriguing explanations, and sleight of hand magic.

*All ages. Shows at 11am and Noon*

**Black's Magic Productions**

Master Magician Bruce Black presents a fun magic show that demonstrates and actually teaches a few magic tricks based on science.

*All ages. Shows at 1:30 and 3pm*

**LOWER PLAZA - OUTSIDE**

**Royal Crest Dairy, Palmer HS and Cool Science**

Make your own ice cream with liquid nitrogen.

**Cool Science**

Make foggy soap bubbles with dry ice.

**5. BERGER HALL**

**Girl Scouts of Colorado**  
Create a "marker man" and watch him float away!

**Humane Society of the Pikes Peak Region**  
Test the Science of Positive Reinforcement with your Pets.

**UCCS Cybersecurity Programs Office**  
Experience virtual reality and play games to learn about cyber security

**Pikes Peak Library District**  
Create a Penny Spinner to explore force, motion and visual effects!

**That Science Fairy**  
Play a "Twist on Engineering" game & explore a simple machine.

**Kratos Defense**  
Play a "Fox Hunt" game to find our missing employee and learn how satellites communicate.

**Challenger Learning Center of Colorado**  
Explore gravity across the solar system and see what you would weigh on other planets.

**6. GALLOGLY EVENTS CENTER**

**FIRST Robotics Team Cougars Gone Wired from Coronado H.S.**  
Play soccer and catch with robots built by high school students

**Donor Alliance**  
Learn about organ and tissue donation by playing a life-sized Operation game!

**United States Air Force Academy Cybersecurity**  
Learn to hide messages with ciphers, crack secret codes and solve puzzles

**Boys & Girls Club**  
Watch our flying drones play "soccer" and learn how we build and repair them.

**Northrop Grumman**  
Explore the movement of air in our wind tube to see how different shapes affect floating and flying.

**iFLY Colorado Springs** Learn the science behind indoor skydiving.

**CS Utilities**  
Learn about electric safety as we zap our model with sparks and lightning

**Pikes Peak Mycological Society**  
Check out our marvelous mushrooms and fantastic fungi and learn how you can help them grow.

**7. CENTENIAL HALL**  
**1ST FLOOR**

**National Weather Service**  
Explore flash floods, tornadoes and other extreme weather safety.

**UCCS GES Geomorphology Lab**  
See the instruments scientists use to measure environmental data.

**UCCS Biochemistry and Chemistry Club**  
Make Goldenrod paper art by painting with household acids and bases.

**Lockheed Martin**  
Ride and race with Newton's Laws of Motion on our rocket sleds.

**ROOM 203 - SHOWS**

**Cool Science and the USAF Academy Department of Chemistry**

**Chemistry Magic Show**

Always a fan favorite, experience the wonders of chemistry with our own Dr. Ron Furstenau performing his signature magic show for all ages. "Potions" will change colors, explode and even freeze right before your eyes!

*All Ages. Shows at 10:30am & Noon*

**UCCS Chemistry Dept**

**Chemical Illusions**

**- A Chemistry Magic Show**

Dr. Elise Naughton and students from the UCCS Chemistry Dept. demonstrates their own take on the magic of chemistry with rainbow fire, flaming gummy bears, an electric pickle, a genie in a bottle and more!

*All Ages. Shows at 1:30 & 3pm*

**8. PARKING LOT 224 - BELOW UNIVERSITY CENTER**

**Drive Electric Colorado**  
Check out a wide variety of electric vehicles and talk to a team of experts.

**High Altitude Race Engineering UCCS FSAE**  
UCCS student's competition electric race car.

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[www.coloradogives.org/coolscience](http://www.coloradogives.org/coolscience)

