

## 3D Printing and Design Workshops Come to the Pueblo Campus and STEM Center

The Pueblo Community College STEM Center and STEM EDGE program recently hosted 3D printing workshops to give students from several Pueblo schools the opportunity for hands-on learning. Students went through an overview of 3D printing, how 3D printing is used professionally, design and reverse engineering processes with TinkerCAD to create an air-powered vehicle, actual 3D printing with a tour of our facilities, and a test process of their vehicles. Students also learned about the STEM Center's various offerings and enjoyed free transportation and lunch.

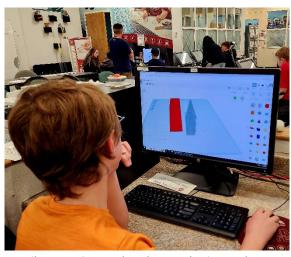


STEM Outreach Coordinator, Parker Banas, presents to a freshman class from Central High School.

If you are a teacher interested in signing your class up for a free workshop, please contact Parker Banas at parker.banas@pueblocc.edu.



Students from Central High School race their 3D printed car towards the finish line!



Liberty Point student learns the ins and out of TinkerCAD

#### **STEM Student Spotlight**

#### STEM EDGE would like to highlight Vashti Trujillo!

Vashti is a current STEM Associate of Science degree student, who is enrolled concurrently, with a local high school. Vashti participates in Associated Student Government, TRIO Upward Bound, STEM EDGE, Space Grant, and many other programs on campus and in the community. Vashti has demonstrated a uniqueness that allows for a classroom to feel full of laughter and brings conversations that lead to genuine friendship. She has applied to attend Colorado School of Mines to attend an engineering program! She has ambition and will be a future leader from Pueblo Community Colleges own!



Vashti Trujillo is a concurrent enrollment STEM student who is working on her Associate of Science degree at PCC.

#### STEM Events

#### Periodic Table Day:

PCC students gathered in the STEM Center to celebrate National Periodic Table Day. There were associated games including a guessing game, bingo, and pin the element on the table. For students to refamiliarize themselves with all the elements, a festive song was played for reference.

PCC Students played Periodic Table Bingo during Periodic Table Day in thve STEM Center.

#### **Darwin Day:**

In honor of Charles Darwin and his contribution to evolution as we know it, the

STEM Center showed wildlife and nature documentaries for all to enjoy. Whether you know of his accomplishments or have an interest in biology, Darwin day was a fun way for students to relax and learn something along the way.



















#### STEM EDGE Outreach Southwest:

#### Flying in a World Beyond Earth

#### The "Ingenuity" of Third Grader

Dolores third graders became aerial explorers in space. Recently, the students learned about planets and the solar system. One of the objectives was to have the students invent their own planets. After they invented their planets, they learned how to fly drones to explore their planets. An additional component of the unit was to learn about the Mars drone, Ingenuity.







Third graders learn how to fly a DJI Tello Drone.

The students studied Ingenuity's engineering and learned about its groundbreaking mission. Then they were introduced to Mini Tello drones. With these drones, students practiced manual flight controls and maneuvers. They used their imaginations to navigate planetscapes that mimicked other worlds. The students enjoyed using drone technology and their creativity to learn about space. This experience offered a taste of what lies ahead in the science of unmanned exploration in space.



Students acquire new skills regarding coding and programming with our drone program.

#### What is available as part of the STEM EDGE program?

- Advising
- Career development & Work-based learning
- Internship

- Transfer
- Tutors
- Undergrad research
- Workshops



## EGG1020 Engineering Methodologies comes to PCC Southwest

Melissa Watters, the PCC Southwest STEM Academic and Career Expert, is offering EGG1020, Engineering Methodologies, this semester. This is the first time the Southwest Campus has been able to offer this class. Students have been delving deeply into the engineering design process, reviewing physics concepts, and practicing their CAD with Fusion360. Their most recent project is a robotics project which requires engineering design, programming, and a CAD drawing for a



Students tinker with their robotics to learn more about the engineering and internal mechanisms



Students collaborate together on an engineering problem, looking for a solution.

### **Drones fly high at PCC Mancos campus**

PCC Southwest STEM is sponsoring a drone workshop for students on our campus in Mancos, partnering with the Agriculture Department and Colorado State University-Fort Collins Drone Center. Students will learn about commercial applications of drones, drone careers, PCC Southwest drone licensing and certificate program courses and what it takes to become a professional drone pilot. They also will get the chance to fly some of the STEM program drones.



## LEARN TO FLY



# Attend a FREE Drone Workshop

Wed., Mar. 1 or Thu., Mar. 9
Noon-1:20 pm
PCC Southwest Mancos Campus, Room 103

- Hands-on: Learn to fly one of our drones
- · Find out about drones and drone careers
- Get information about drone courses and licensing opportunities at PCC Southwest

Presented by the CSU Drone Center and the PCC Southwest Agriculture & STEM Program staff

