

EXPANDING HORIZONS 2017 STEM DISCOVERY PROGRAM

For Grades 3-5 and 6-8

RIVERSIDE

One Week: June 26-June 30
9 a.m.-4 p.m.

Note: The same course topics will be taught for the elementary strand as for the middle school strand, but the content and activities will be grade-level appropriate.

9-10 a.m.

Check-in, Guest Speakers 




10-11:15 a.m.
Robotics²

Get on the ball with Robotics?! Sphero SPRK is more than a robot; it's a vehicle for discovering science, math, programming, and art in new ways. Students will engage their hands and their minds while working on interactive and collaborative STEAM challenges that put analytical and problem-solving skills to the test. Whether you took our introductory course last year or you have never programmed before, this course is for you!

11:15-12:30 p.m.
**Human Spaceflight
and Aeronautics**

Spaceflight is out of this world! Become a young rocket scientist by researching the science of travel through space. Discover the physics of rockets, learn how spacecraft move in orbit, the purposes for conducting spacewalks, and more. Students will explore extraterrestrial environments, how artificial spacecraft environments are created to preserve the well-being of astronauts, and physiological responses to living without gravity.

12:30-1:15 p.m. **Lunch** 

1:15-2:30 p.m.
Green Power!

How can we use resources around us to create energy? Depletion of conventional energy sources, concerns about the environment, and the negative effects of climate change call for an increase in renewable energy. Learn how using renewable energy helps the environment and how energy can be generated from sources Mother Nature can replace, like wind, water and sun. Discover the real-life applications of green energy systems and how they can have a huge impact on the world.

2:30-3:45 p.m.
Physics in Motion

Everything in the universe moves! Physics studies many different types of force and motion. Students will discover the mechanics of motion by designing and observing the motion of roller coasters and cars. They will practice concepts of engineering and physics as they design a contraption for protecting a raw egg from a high fall!

3:45-4 p.m. **Daily Wrap** 

PROGRAM INFORMATION

Phone: (951) 827-1032

Website: www.extension.ucr.edu/youth

Email: youth@ucx.ucr.edu

Visit our website for requirements and to apply.

This is a sample schedule. Content may be delivered in a different sequence.

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Professional Studies