

Instructor Katie Burns  
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Phone 530.575.1789  
Cost: \$240

Exploring Science Course  
Fall 2018-Spring 2019  
Tue/Thurs 2:30-3:30

**Course Description:** In this class, students will investigate the amazing world of interdisciplinary science. During each class, we will concentrate on moving through the steps of the scientific method through a variety of STEAM experiments and projects. Students will conduct real world investigations as they test their hypothesis and designs. Students will ask questions and solve problems with chemistry, physics, and engineering.

Chemistry meets Physics in **Bubbleology**: Exploring these perfectly spherical, transparent, yet reflective, clear but colorful objects can teach us about limits of geometry, the light spectrum, and molecules in motion.

Physics meets Engineering in **Crash Science**: During this unit, students will learn how today's engineers are building safer cars, houses and more by understanding impact forces, motion, and work. Students will design and engineer their own safety products using hydraulic power, simple and complex machines.

Biology meets Chemistry in **Crime Lab Science**: In this unit, students will solve mysteries with dynamic methods that real forensic scientists' use in the field.

This class will cover most Next Generation Science Standards for 4th-6th grade. Topics covered, project details, and NGSS standards met will be listed on Schoology for parents and ESs to reference.

**Class Materials:**

- A binder to hold lab & design write-ups, worksheets, and other materials. This binder can be shared with other subjects.
- A Student Schoology account (please make sure your student knows their login information for class time.)

**Expectation:**

- Students should try to arrive to every class on time, with their science binder, so they can fully participate in group activities.
- Students will be using class Chromebooks and other lab materials. Students are expected to treat class equipment with care and respect.
- There is no textbook for this class, but worksheets, hand-outs, and online activities will be available for students to continue their explorations at home.
- If the student misses a class, Schoology will have information to help them keep apprised on assignments and topics covered.