

CULINARY CHEMISTRY

Wednesday, September 14-December 14 (no class Oct 10-14 and Nov 21-25; 12 weeks)

9:30am-11am

Ages 11+

In this course, students work on strengthening their understanding of nutrition, cooking techniques, and food safety as they utilize and apply their Chemistry skills towards food science. Please be mindful of your student's dairy, soy, gluten, etc. allergies or constraints as we will be handling and cooking food. All lab costs are included in registration fee.

Instructor: Candra Eden, BSc

Location: STEM Lab (suite 21)

Course fee: \$275 OR \$25/lab

10% sibling discount

Register for full semester or individual labs.

LAB SCHEDULE:

FIRE SAFETY - Wednesday, September 14

Students learn about everyday fire safety measures in order to stay safe in the kitchen as they learn about the chemical components of extinguishing a fire.

NUTRITION - Wednesday, September 19

Students explore how the body processes food and the role of various essential vitamins and nutrients.

CITRIC ACID - Wednesday, September 28

We investigate the properties of sour foods and treats as we look at the chemical structure and uses of citric acid.

SALTS & SUGARS - Wednesday, October 5

Kids learn about the molecular structure of salts and sugars and how they chemically change the properties of food as they make rock candy and see how to preserve food by using salt.

BUTTERFLY PEA FLOWER - Wednesday, October 19

Students learn about the pH levels of various foods and how this powder indicator can be used to make color changing teas and drinks.

BOBA - Wednesday, October 26

Students strengthen their chemistry skills by assembling boba bubbles in a chemical reaction.

PROPAGATING FRUITS & VEGGIES - Wednesday, November 2

Students learn about growing and repurposing vegetables as they work to regrow their own food.

ICE CREAM - Wednesday, November 9

This week, we learn about state change as we go from liquid to solid in order to make ice cream.

MOLECULAR GASTRONOMY - Wednesday, November 16

Today, we discuss this branch of food science as we transform food ingredients in unconventional ways by focusing on the physical and chemical processes that arise when cooking.

SMOOTHIES - Wednesday, November 30

Students learn about the basics of meal prep and how to safely use kitchen tools as we work on prepping fruits and veggies. *Food Handling Info: almond milk, spinach, strawberries, banana, and oats*

BAKING - Wednesday, December 7

Students learn about measurements and conversions as we work on our baking techniques as we prepare a quick recipe manipulating chocolate. *Food Handling Info: flour and chocolate*

MEAT PREP - Wednesday, December 14

Today, we discuss the proper way to handle raw proteins safely as we go over disinfecting, temperature, and a quick recipe to try at home. *Food Handling Info: chicken, soy, onions, bell peppers, and zucchini*