

COOKING WITH CHEMISTRY

Mondays, Jan 26-May 4 (no class Jan 19, Feb16, March 16, April 6; 12 weeks)

11:00am-12:15pm

Ages 8-10

Welcome to the Food Science Lab, where cooking meets chemistry! Each week, students mix, freeze, bubble, grow, and taste their way through scientific discoveries—making ice cream, building boba, and even whipping up edible experiments through molecular gastronomy. Along the way, they learn real kitchen safety, food prep skills, and the science behind what we eat—so they can cook, experiment, and create like young chefs. 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: Jessica Barnes, BSc

Location: Science Center (suite 5)

Course fee: \$220 OR \$20/lab

10% sibling discount

Register for full semester or individual labs.

LAB SCHEDULE:

KITCHEN SAFETY - Monday, January 26

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

NUTRITION - Monday, February 2

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

CITRIC ACID - Monday, February 9

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

SALTS & SUGARS - Monday, February 23

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 - Monday, March 2

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 - Monday, March 9

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

PROPAGATING FRUITS & VEGGIES - Monday, March 23

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

ICE CREAM - Monday, March 30

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

MOLECULAR GASTRONOMY - Monday, April 13

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 - Monday, April 20

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 - Monday, April 27

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 - Monday, May 4

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*