

# Culinary Chemistry Syllabus

## Phelps Center for Gifted

### 5 - 8th Grade



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**Description:** This class will explore the science of food, cooking, and taste. How does our brain process taste? What are the chemicals in our foods and how do they affect us? How are they affected by temperature? How do different forms of cooking affect the foods and how they taste? How have agricultural practices changed the flavor of food over time? We will be learning about proteins, fats, and carbohydrates. There will be some experimenting and tasting.

This class is will provide challenging methods for applying chemistry in unique and meaningful ways by learning about their food through the lens of both biology and chemistry. It will provide them with the application of their knowledge by experimenting and cooking each week.

**Objectives:** Students will know and understand:

- How to ask scientific questions and define problems
- How to plan and carry out investigations
- How to analyze and interpret simple data
- How to obtain, evaluate and communicate scientific information
- How energy in chemical processes affect our food and cooking
- The basic types of organic macromolecules found in food and how they are modified in cooking.
- Historic and global uses of food and food transportation

Students will be expected to abide by WINGS guidelines:

- ❖ Be respectful of individuals and property.
- ❖ Be responsible and trustworthy.
- ❖ Be courteous and kind.
- ❖ Be cooperative with others.
- ❖ Practice safety.

Students who complete this unit will have a portfolio of information and recipes.