

# LEA III Capacity Building Grant Academics In Culinary Education

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## **Integration Statements**

Deep understanding of mathematics occurs when students use mathematical reasoning to solve real world problems. By learning math through the vehicle of culinary arts students are challenged to face real problems, seek solutions and cross boundaries to find answers. In this class students are not asked to "do" math rather to "use" math.

## **Course Description**

This class is designed to prepare students for employment in the food service industry while completing a comprehensive course of study in mathematics. Students will utilize mathematical skills and reasoning and marketable culinary skills by demonstrating the principles of safety and sanitation, food preparation, successful operation of food service business, teamwork to manage an environment conducive to quality food production and service operations. Students will have an opportunity to participate in an internship in which they will demonstrate the skills they have learned in this course.

## **Essential Questions**

- What basic mathematical knowledge and skills are needed to meet the unique mathematical demands of the food service industry?
- How can the mathematical knowledge and skills gained in successful operation of a food service industry be transferred to other real world mathematical problem settings?

## **Supporting Questions**

- Since the use of mathematics is an integral part of the daily activities that take place in the professional kitchen and food service operation, how can the proper use of mathematics be used to help ensure the profitability of a food service operation?
- What mathematical terms and symbols can help with concepts can help you with food service mathematics?
- What food preparation skills are needed for the successful operation of a food service business?

- Each standardized recipe has a specific yield, which can be increased or decreased as need. The recipe's yield is used to determine the cost per portion to serve the item to your guest. The portion cost is then used to develop menu or sales price.

## **Content and Performance Objectives**

### **Food Service Basic Weights and Measures**

- The student will be able to identify and demonstrate the basic principles of safety and sanitation procedures used in the food production and service industry.
- The student will be able to identify, select, use safely and care for commercial tools in the professional kitchen.
- The student will be able to demonstrate commercial preparation skills for all menu categories to produce a variety of food produces.
- The student will demonstrate accurate measurement techniques.
- The student will be able to accurately convert various weights and measurements.

### **Business Math**

- The student will be able to demonstrate foundational math skills and apply skills to food production and service operations.

### **Purchasing and Inventory Control**

- The student will be able to evaluate the importance of inventory and its relation to quality food production and service.
- The student will be able to create a standardized recipe and manipulate the yield.
- The student will be able to demonstrate the implementation of food production and service management functions including, as purchased, edible portion, as served and yield percent.
- The student will be able to evaluate the importance of inventory and its relation to quality food production and service.

### **Standard Accounting Practices**

- The student will be able to demonstrate the ability to use effective accounting procedures to create and maintain a successful food service operation.