

J. Sargeant Reynolds Community College
Course Content Summary

Course Prefix and Number: HRI 110 **Credits:** 1

Course Title: Mathematics for the Food Service Industry

Course Description

This course explores comprehensive mathematical skills necessary for various careers in the foodservice industry. Students will practice and demonstrate understanding in conversions, scaling, yield percent's, purchasing and portioning, recipe costing, and kitchen ratios. Co-requisite: CUL 136. Lecture 1 hour. Total 1 hour per week. 1 credit

General Course Purpose

Focusing on the math skills needed for successful careers including: calculating percentages, ratios and proportion, weights and measures, conversion factors, yield tests, as purchased vs. edible yield, recipe conversion, purchasing and recipe costing as related to the food service industry. Additionally, computational skills, calculator usage, portion costing and control, food cost percent, determining menu prices, and data analysis through select problems commonly encountered in the industry. Includes a refresh on these topics: fractions, decimals, unit conversions, and algebra concepts.

Course Prerequisites/Co-requisites

Co-requisite: CUL 136

Course Objectives

Upon completing the course, the student will be able to:

- a. Demonstrate basic math computations including percentages, fractions and decimals related to the food service industry.
- b. Demonstrate weights and measurement, including conversions and equivalents
- c. Calculate measurement and recipe scaling, conversions, baker's percent, rounding
- d. Explain scaling, conversions, ratios, portion costing, yields and yield tests
- e. Determine food costs from recipes and perform menu pricing
- f. Apply critical thinking and problem solving related common industry scenarios
- g. Apply knowledge to use of inventory, production sheets, and forecasting

Major Topics to be Included

- a. Weights, measures, and related math calculations
- b. Recipe scaling, conversions, factors, percentages, fractions, rounding
- c. Purchasing, pack sizes, portions
- d. Food costing, yield tests, menu pricing, and analysis
- e. Inventory, production charts, forecasting
- f. Critical thinking and problem solving related to the hospitality and food service industries

Effective Date/Updated: January 13, 2025