

CATALOG INFORMATION

Dept and Nbr: ADLTED 782    Title: INTRO CULINARY MATH PT 2  
Full Title: Introduction to Culinary Math Part 2  
Last Reviewed: 12/12/2016

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	0	Lecture Scheduled	0	6	Lecture Scheduled	0
Minimum	0	Lab Scheduled	2.00	3	Lab Scheduled	12.00
		Contact DHR	0		Contact DHR	0
		Contact Total	2.00		Contact Total	12.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 0.00

Total Student Learning Hours: 12.00

Title 5 Category: Non-Credit  
Grading: Non-Credit Course  
Repeatability: 27 - Exempt From Repeat Provisions  
Also Listed As:  
Formerly:

**Catalog Description:**  
Application of intermediate arithmetic skills, including percents, conversions, formulas, and measurement systems as related to the culinary industry. Develops problem solving skills for tasks such as yield percentages, edible portion costs, and other applied math areas common to the food service field.

**Prerequisites/Corequisites:**

**Recommended Preparation:**  
Course Completion of ADLTED 781

**Limits on Enrollment:**

**Schedule of Classes Information:**  
Description: Application of intermediate arithmetic skills, including percents, conversions, formulas, and measurement systems as related to the culinary industry. Develops problem solving skills for tasks such as yield percentages, edible portion costs, and other applied math areas common to the food service field. (Non-Credit Course)  
Prerequisites/Corequisites:

Recommended: Course Completion of ADLTED 781

Limits on Enrollment:

Transfer Credit:

Repeatability: Exempt From Repeat Provisions

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>	<b>Effective:</b>	<b>Inactive:</b>
<b>CSU GE:</b>	<b>Transfer Area</b>	<b>Effective:</b>	<b>Inactive:</b>
<b>IGETC:</b>	<b>Transfer Area</b>	<b>Effective:</b>	<b>Inactive:</b>
<b>CSU Transfer:</b>		<b>Effective:</b>	<b>Inactive:</b>
<b>UC Transfer:</b>		<b>Effective:</b>	<b>Inactive:</b>

**CID:**

**Certificate/Major Applicable:**

Certificate Applicable Course

## **COURSE CONTENT**

### **Student Learning Outcomes:**

At the conclusion of this course, the student should be able to:

1. Perform intermediate level arithmetic computations involving fractions, decimals, and percents as related to weight, volume, and and measurement systems within the culinary industry
2. Use conversions, ratio and proportion, food service formulas, and other strategies to solve complex application problems common to the industry

### **Objectives:**

Upon completion of the course, students will be able to:

1. Perform arithmetic computations and conversions involving fractions, decimals, and percents
2. Determine efficient strategies for U.S. Customary and metric system measurement conversions
3. Apply ratio and proportion and food service formulas to scale recipes
4. Use estimation skills to determine reasonable range for solutions in problem-solving
5. Simplify and evaluate calculations using a scientific calculator

### **Topics and Scope:**

#### **I. Arithmetic Concepts Applied to Food Service**

A. Multi-step calculations using decimals, fractions, and measurements

B. Percent

1. relationship to decimals and fractions
2. solving percent problems using ratio and proportion
3. methods for conversions between decimals, fractions, and percent
4. use of scientific calculator to solve percent and conversion problems

#### **II. Nutrition and Food Service Application Problems**

A. Strategies for solving intermediate level word problems

1. Translating words to symbols

2. Word problem set-up
3. Using estimation for checking for reasonable solutions
- B. Problems involving percentages
- C. Ratio and proportion
  1. Ingredient quantities
  2. Recipe conversion factor
  3. P:S ratio (polyunsaturated: saturated fatty acid ratio)
- D. Using substitution to evaluate formulas
  1. Food yield problems
  2. Production costs
- III. Conversion Between U.S. Customary and Metric Systems
  - A. Methods for calculating conversions in weights and volume
  - B. Typical conversion problems in food service

### Assignment:

1. Assignments providing practice and reinforcement for arithmetic problems.
2. Individual and group work on application of arithmetic skills and problem solving strategies related to the culinary field.
3. In-class quizzes (3 to 4)
4. Final unit test

### Methods of Evaluation/Basis of Grade:

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None

Writing  
0 - 0%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Arithmetic problems; application problems

Problem solving  
40 - 50%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

None

Skill Demonstrations  
0 - 0%

**Exams:** All forms of formal testing, other than skill performance exams.

Quizzes and final unit test: multiple choice, fill-in, short answer

Exams  
40 - 50%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

Attendance and participation in class activities; group work

Other Category  
5 - 10%

**Representative Textbooks and Materials:**

Instructor prepared materials

Culinary Math. 4th ed. Blocker, Linda and Hill, Julia. Wiley. 2016

Culinary Math Principles and Applications. 2nd ed. McGreal, Michael and Padilla, Linda.

American Technical Publications. 2014