



MERCER
COUNTY COMMUNITY COLLEGE

COURSE OUTLINE

Course Number HOS 111	Course Title Culinary Math	Credits 1
Hours: Lecture/Lab/Other 1/0/0	Co- or Pre-requisite MAT 037 or MAT 042	Implementation Semester & Year Spring 2022

Catalog description:

Students will demonstrate a working knowledge of key math concepts related to culinary arts. Topics will include calculating yield percent, determining portion costs, periodic food costs, selling price determinations, weights and measures, changing recipe yields, and converting between metric and U.S

General Education Category:
Not GenEd

Course coordinator:
Douglas Fee
feed@mccc.edu
609 570-3447

Required texts & Other materials:

Textbook: Math Applied Math for Food Service Sara Labenski
ISBN: 9780138492175

Course Student Learning Outcomes (SLO):

The student will be able to:

1. Demonstrate a working knowledge of recipe conversions for increasing and decreasing yields utilizing both metric and standard measurements (ILGs # 2; PLOs # 2)
2. Practice the principles as related to calculations for recipe conversion including yield, food cost, and formula conversions. (ILGs # 2; PLOs #2)
3. Analyze and assess food and labor cost and the correlation between these costs and the overall budget in a food service operation. (ILGs # 2, 11; PLOs # 2, 6)
4. Apply the principles required to help determine menu pricing and costing and demonstrate a working knowledge in this area of food cost percentage (ILGs # 2, 10; PLOs # 2, 4, 6)
5. Question and differentiate potential budget outcomes-based yield, portion control, standardized recipes, and labor costs (ILGs # 2, 11; PLOs # 2, 6)
6. Apply theory with practice by performing exercises related to common calculations in the hospitality industry including weights and measures, portion costs and yield tests (ILGs # 2; PLOs # 6)

Course-specific Institutional Learning Goals (ILG):

Institutional Learning Goal 1. Written and Oral Communication in English. Students will communicate effectively in both speech and writing.

Institutional Learning Goal 2. Mathematics. Students will use appropriate mathematical and statistical concepts and operations to interpret data and to solve problems.

Institutional Learning Goal 10. Information Literacy: Students will recognize when information is needed and have the knowledge and skills to locate, evaluate, and effectively use information for college level work.

Institutional Learning Goal 11. Critical Thinking: Students will use critical thinking skills understand, analyze, or apply information or solve problems.

Program Learning Outcomes for Hotel Restaurant Management, Culinary / Pastry Arts Culinology

2. Develop appropriate menus and recipe selections and recognize costs incurred and apply cost control techniques
4. Develop professional written and verbal, communication and computational skills related specifically to hospitality.
6. Analyze computer data for information that impact budget and income including prime costs, hotel registration, accounts receivable and billing.

Units of study in detail – Unit Student Learning Outcomes:

Units of study in detail.

Unit I Kitchen Calculations [Supports Course SLO # 1, 2]

The student will be able to...

- Demonstrate a working knowledge of measurements and measurement conversion formulas
- Demonstrate a working knowledge of recipe conversions including the altering of yield

Unit II Menu Considerations [Supports Course SLO # 1, 2, 4, 6]

The student will be able to...

- Conduct a yield test and understand the information required and how to interpret the data to determine actual costs
- Demonstrate a working knowledge Of unit and recipe costing formulas
- Demonstrate a working understanding and understanding of menu pricing and apply the various theories of menu pricing strategies

Unit III Hospitality Budgeting [Supports Course SLO # 3, 5, 6]

The student will be able to...

- Demonstrate a working knowledge of inventory and food cost percentages and apply these formulas as they are used in the hospitality industry
- Demonstrate a working knowledge of labor cost and labor cost percentage and apply these formulas as they are used in the hospitality industry
- Complete a menu budget project as a group utilizing conversion and yield test formulas and theories and ethical discussions to determine and justify a potential implications of budget scenario outcomes

Evaluation of student learning:

Participation during class	10%
Unit Tests	30%
Homework and Quizzes	20%
Menu budget project	20%
Final exam	20%