SINCLAIR COMMUNITY COLLEGE
DAYTON, OHIO
DEPARTMENT SYLLABUS FOR COURSE IN

MAT 1125 – MATH FOR THE CULINARY ARTS & BAKING & PASTRY ARTS PROFESSIONAL (3 SEMESTER HOURS)

COURSE DESCRIPTION:	This course is specifically for Culinary Arts and Baking & Pastry Arts majors. The math requirement for this course will form the foundations needed for costing of food and beverage, recipe conversion, bakers scaling (of liquid verses dry weights), edible product yield percentages, and menu cost cards. Students will be expected to demonstrate proficiency in converting improper as well as mixed number fractions, (add, subtract, multiply, and divide) decimals, solve complicated word problems and more.
COURSE OBJECTIVES:	To provide students with an understanding of the mathematical skills and concepts required to be successful in culinary and/or pastry arts.
PREREQUISITE:	Satisfactory score on Mathematics Placement Test or grade of "P" in MAT 0050.
ASSESSMENT:	In addition to required exams as specified in the syllabus, instructors are encouraged to include other components in computing final course grades such as homework, quizzes, and/or special projects. However, 80% of the student's course grade must be based on in-class proctored exams.
TEXT:	**Math For The Professional Kitchen** Laura Dreesen, Michael Nothnagel, Susan Wysocki Wiley, 2011 **Adopted: Spring 2017**
CALCULATOR:	A TI-30XIIS calculator is required. You are not permitted to use a graphing calculator. **Note: No calculator is allowed on Test 1**
GRADING:	Homework 10% Group work/Project 10% Exams (3 exams 20% each) 60% Final Exam 20%

GRADING SCALE:	0-59%	F
	60-69&	D
	70-79%	C
	80-89%	B
	90-100%	A

SINCLAIR COMMUNITY COLLEGE
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CLASS SCHEDULE FOR COURSE IN
MAT 1125 – MATH FOR THE CULINARY ARTS & BAKING & PASTRY ARTS
PROFESSIONAL (3 SEMESTER HOURS)
CLASSES MEETING TWO TIMES A WEEK

Lecture	Chapters	Topics
1		Introduction, Why am I here? Basic Arithmetic Review & Diagnostic assessment
2		Basic Arithmetic Review Fractions & Decimals &
3	1	Units of Measure
4	1	Dry v. Liquid **laboratory project**
5	1	Metric Measures/Converting Weight and Volume
6	2	Recipe Scaling
7	2	**Group Activity: Scale It Up!!!!**
8	1-2	Chapters 1 & 2 Review
9	1-2	Exam One
10	3	Yield Percent
11	3	Wasted Quantities
12	3	Book of Yields
13	3	Book of Yields
14	4	Purchasing & Portioning
15	4	Purchasing and Portioning
16	5	Recipe Costing
17	5	Recipe Costing
18	5	**Cost it out activity**

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TWO TIMES A WEEK SECTIONS CLASS SCHEDULE (*continued)*

19	5	Catch Up Day
20	3-5	Review
21	3-5	Test 2 (Chapters 3, 4 & 5)
22	6	Kitchen Ratios
23	6	**Laboratory Activity: Calculate ingredient quantities with ratios**
24	6	Special-Case Ratios
25	6	Review
26	6	Test 3
27		Project Presentations Due
28		Project Presentations Due
29	1-3	**Review Chapters 1-3**
30	4-6	**Review Chapters 4-6**
Finals Week		
1 – 2 Class		*Review*
1 – 2 Class		**Comprehensive Final Exam**

***Note:** The conversion activity can actually be used at any time while covering chapters 8 and 9.

Math 1125 Formulas & Conversions

Standard unit equivalents

WEIGHT

28.35 g	**=**	**1 oz**						
453.6 g	**=**	**16 oz**	**=**	**1 #**	**=**	**0.4536 kg**		
1000 g	**=**	**35.27 oz**	**=**	**2.205 #**	**=**	**1 kg**		

VOLUME

						1 T	**=**	**3 t**	**=**	**½ fl oz**		
						2 T			**=**	**1 fl oz**	**=**	**29.59 mL**
				1 C	**=**	**16 T**	**=**	**48 t**	**=**	**8 fl oz**		
			1 pt	**=**	**2 C**				**=**	**16 fl oz**		
		1 qt	**=**	**2 pt**					**=**	**32 fl oz**		
									33.8 fl oz	**=**	**1000 mL**	**=** **1 L**
1 G	**=**	**4 qt**							**=**	**128 fl oz**		

Chapter Two

Scaling factor = desired yield ÷ current recipe yield

Scaling factor = constraining quantity ÷ recipe quantity

Chapter Three

Yield percent (Y%) = edible portion (EP) ÷ as purchased quantity (AP)

EP ÷ Y% = AP

AP • Y% = EP

Trim loss percent (TL%) = trim loss quantity ÷ AP

Y% = 100% - TL%

Y% + TL% = 100%

Chapter Four

AP cost ÷ number of units purchased = AP cost per unit

AP quantity × AP cost per unit = ingredient cost

Cost per portion ÷ selling price = food cost percent

Number of portions • portion size = total EP quantity

AP cost per unit ÷ yield percent = EP cost per unit

AP cost ÷ EP quantity = EP cost per unit

Chapter Five

Cost per portion (CPP) ÷ food cost%(FC%) = selling price (SP)

CPP ÷ SP = FC%

Total EP quantity ÷ number of portions = portion size

Total EP ÷ portion size = number of portions