



COURSE OUTLINE

Course Number HOS 111	Course Title Culinary Math	Credits 1
Hours: lecture/Lab/Other 1/0/0	Co- or Pre-requisite: None	

Catalog description (2009-2011 Catalog):

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.

Is course New, Revised, or Modified? New course

Required texts/other materials:

Textbook: Math Applied Math for Food Service Sara Labenski

Instructor

Revision date: **Course coordinator:** Douglas Fee 570-3447 feed@mccc.edu

Information resources: (Describe the primary information resources that support the course, including books, videos, journals, electronic databases, websites, etc. To request new materials for your course, use the library request form at: www.mccc.edu/student_library_course_form.shtml)

NONE Required

Other learning resources: (Describe any other student learning resources that are specific to this course, including any special tutoring or study group support, learning system software, etc.)

None Required

Course Competencies/Goals:

The student will be able to:

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

Course-specific General Education Knowledge Goals and Core Skills. [To an extent consistent with its primary purposes, **each course in every program** is expected to reflect the college's commitment to general education, as affirmed in the 2005 General Education Policy. A **General Education Course** is one whose primary purposes and overall design coincide strongly with one or more of the approved general education goals and objectives. For any approved (or proposed) General Education Course, the General Education Goals and Objectives form (the form identified as the "Gen Ed Attachment") should be completed and attached to the course outline. Below is a complete list of Mercer's General Education Knowledge Goals and Core Skills. Retain on this course outline the Goals and Skills that pertain to your course and ***delete those that are not a central part of the course.***]

General Education Knowledge Goals

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

Goal 4. Technology. Students will use computer systems or other appropriate forms of technology to achieve educational and personal goals.

Goal 9. Ethical Reasoning and Action. Students will understand ethical issues and situations.

MCCC Core Skills

Goal A. Written and Oral Communication in English. Students will communicate effectively in speech and writing, and demonstrate proficiency in reading.

Goal B. Critical Thinking and Problem-solving. Students will use critical thinking and problem solving skills in analyzing information.

Goal C. Ethical Decision-Making. Students will recognize, analyze and assess ethical issues and situations.

Goal D. 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.

Goal E. Computer Literacy. Students will use computers to access, analyze or present information, solve problems, and communicate with others.

Goal F. Collaboration and Cooperation. Students will develop the interpersonal skills required for effective performance in group situations.

Units of study in detail.

Unit I Kitchen Calculations

The student will be able to...

- Demonstrate a working knowledge of measurements and measurement conversion formulas (Course competencies 1,3 :Gen Ed Goal 2 MCCC core skills B,D)
- Demonstrate a working knowledge of recipe conversions including the altering of yield (Course competencies 1, 2, 10 :Gen Ed Goal 2, 4 MCCC core skills B,D)

Unit II Menu Considerations

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 (Course competencies 2, 5 :Gen Ed Goal 2 MCCC core skills B, D)
- Demonstrate a working knowledge Of unit and recipe costing formulas (Course competencies 2, 8, 2, 10 :Gen Ed Goal 2 MCCC core skills B, D)
- Demonstrate a working understanding and understanding of menu pricing and apply the various theories of menu pricing strategies (Course competencies 2, 7, 8, 9 :Gen Ed Goal 2 MCCC core skills B, D, F)

Unit III Hospitality Budgeting

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 (Course competencies 2, 6 :Gen Ed Goal 2 MCCC core skills B, D)
- Demonstrate a working knowledge of labor cost and labor cost percentage and apply these formulas as they are used in the hospitality industry (Course competencies 2, 6, 10 :Gen Ed Goal 2 MCCC core skills B, D)
- Complete a menu budget project as a group utilizing formulas and theories and ethical discussions to determine and justify a potential implications of budget scenario outcomes (Course competencies 2, 6, 10 :Gen Ed Goal 2, 9 MCCC core skills A,B, C, D, F)

Evaluation of student learning:

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

Coursework will include work begun in class and completed by the student individually or as part of a group depending on the assignment. Tests will be given to determine if the students are retaining the information discussed in class and reinforced through assignments. A menu budget project will be used to assess the students understanding of the math formulas learned and how the formulas learned are to be applied mathematically and the potential implications the budget numbers would have on employees.

Academic Integrity Statement:

Any student who a) knowingly represents work of others as his/her own. b) uses or obtains unauthorized assistance in the execution of any academic work, c) or gives fraudulent assistance to another student is guilty of cheating. Violators will be penalized in accordance with established college policies and procedures.

Please make every attempt to come to all class sessions, to come on time and stay until the end of the class unless you have notified the instructor you are leaving early. There may be a time when you are unavoidably late for class or leave early. If that is the case please choose a seat near the room entrance. Once the class session has begun, please do not leave the room and re-enter unless it is an emergency. If you must miss a class it is you are still responsible for all material covered, for announcements made in your absence and for acquiring any materials that may have been distributed in class. It is important to stay focused on the class discussion. For this reason, only one person at a time in the class should be speaking. Side conversations are distracting for surrounding students and the instructor. Please also remember to turn off any pager or cell phone, or set it to vibrate so you do not distract the class.

HOS111 Culinary Math

Professor:

Office:

Phone:

Email:

Class 1	Getting to Know You - Chapter 1 Measurements/Conversions
Class 2	Chapter 2 Recipe Conversions *(Quiz Chapters 1-2) *Exam 1 (Chapters 1 & 2)
Class 3	Chapter 3 Unit and Recipe Costing & Chapter 4 Yield Tests *Project Handed Out*
Class 4	Chapter 5 Inventory/Food Cost % & Chapter 6 Controlling Food Costs *(Quiz Chapter 6)
Class 5	*Exam 2 (Chapters 3-5)* *Draft Project Reviewed*
Class 6	Chapter 7 Menu Pricing - ***PROJECT DUE***
Class 7	*Final Exam (Chapters 6 & 7)