



**COURSE OUTLINE
ACADEMIC YEAR 2011**

It is the student's responsibility to retain course outlines for possible future use in support of applications for the transfer of credit to other educational institutions.

PROGRAM: Master Chef Program

COURSE NUMBER/NAME: **CMC. 702 -Facilities Design and Management**

PRE-REQUISITE(S): None

PRE-REQUISITE FOR: Graduation

CREDIT VALUE: 3

PERIODS/WEEKS: 3 periods/8 weeks

PREPARED AND/OR REVIEWED BY: G. Ian Jameson, FCSI

APPROVED BY:

Program Coordinator:

Date: _____

Dean/Associate Dean:

Date: _____

I COURSE DESCRIPTION

This course examines the key principles required for the selection, designing, constructing, maintaining and managing of a restaurant and/or foodservice enterprise. The course examines different restaurant types and the operational factors affecting location and layout.

II LEARNING OUTCOMES

Learning Outcomes are clear statements of the critical/essential knowledge, skills and attitudes, which, a student is, required to demonstrate to indicate successful completion of the course.

A. Core Outcomes

1. Explain the importance of planning in ensuring the success of a food service operation. Identify the characteristics and requirements of a Planning Team.
2. Identify the key layout characteristics of food service facilities based on the specific needs of each operation.
3. Describe the operational factors that influence the planning of a food service facility.
4. Determine the space needs of production and service areas based on the type of equipment used.
5. Identify the factors that determine how receiving and storage areas should be planned.
6. Describe the varying extents of food preparation and food processing that is prevalent in public and private food facilities.
7. Explain the considerations of planning and design according to the various service styles of Foodservice implemented.
8. Describe the proper procedures for the safe and sanitary treatment of equipment and utensils.
9. Identify the fundamentals of energy use and conservation as they relate to cooking, refrigeration and lighting equipment.
10. Evaluate the considerations for the practice of an environmentally supportive operation.
11. Describe the classification of food preparation, cooking and auxiliary equipment including the use of technology in modern day food service operations.

12. Describe and evaluate the types of multi-function cooking equipment and their use in high volume establishments.
13. Identify and understand the fundamentals for the process and creation of Capital Cost and Operating Cost budgets for the purchase of individual items and for large project purchases or renovations.
14. Identify and understand the implications of the service and utility requirements that may happen in the change out of individual pieces of equipment and on larger renovations and/or capital purchases.
15. Describe and understand the Banquet Cook’N’Chill and rethermalization systems and their application in a high volume establishment.

B. Generic/Employability Skills Outcomes

Generic/Employability Skills are transferable skills that provide the foundation for a student’s academic, vocational, and personal success. These skills include communications, personal, interpersonal, thinking, mathematics, and computer skills. Through the successful completion of this course, the student will develop the following Generic/Employability Skills:

1. **Writing**-The student will demonstrate the ability to produce clear, concise, correct, and coherently written texts to suit the intended audience.
2. **Information Technology Basics:** The student will be able to describe basic information technology concepts and perform basic operating system functions.
3. **Resource Management:** The student will be able to identify and use resources effectively for personal and work-related goals, work within time frames and meet deadlines, apply various learning strategies to accomplish an education goal, utilize expertise appropriately, work within a budget, and apply stress management strategies.
4. **Critical Thinking:** The student will be able to apply critical thinking skills in order to make decisions, plan strategies, and question established ideas, identify premises, conclusions and reasons to justify thinking, assess the validity and soundness of arguments, draw conclusions about how information can be used and evaluate the process used in assessing hypotheses and creating models.
5. **Problem Solving or Decision Making:** The student will be able to apply his or her knowledge to demonstrate an ability to solve problems and make decisions in his or her subject area, identify and define problems within the context of the course of study, generate a set of appropriate alternative solutions, and select and implement the best alternative.

6. **Creative Thinking:** The student will be able to demonstrate the ability to think creatively and or to produce products, create new ideas, concepts, products and systems by using idea-generating strategies, create innovative strategies and or products by using a variety of thinking skills and play with ideas and have the confidence to look at information, ideas, problems and existing systems in new ways.
7. **Drawing:** The student will be able to create basic CAD drawings and understand the placement of equipment within the space.
8. **Financial:** The student will be able to understand the processes involved in creating financial plans for Foodservice and the differences between equipment procurement budgets for Capital Cost and Operating Cost expenditures. The student will be able to procure equipment for individual replacement of units and/or for large scale renovations or expansions of existing facilities.

III COURSE CONTENT

The topics, their order and length of time spent on each may vary depending on the interests and needs of each class.

<u>TOPIC</u>	<u>#PERIODS</u>
Topic 1 LAYING THE GROUND WORK • Introduction to course and review of course outline • Laying the groundwork <ul style="list-style-type: none"> ▪ Unique Factors in Foodservice Planning ▪ Steps in Planning ▪ The Planning Team ▪ Research and Analysis ▪ Communication • Chapter One, pages 3-22	3
Topic 2 FOODSERVICE TYPES LAYOUT • Food service types: layout characteristics <ul style="list-style-type: none"> ▪ Planning for Operating and Maintenance Costs ▪ Unit Layout Characteristics - Chapter Two, pages 23-60 <ul style="list-style-type: none"> ▪ Checklist of planning • Chapter Six, pages 146-154	3
Topic 3 OPERATIONAL FACTORS AND SPACE ALLOCATION • Operational factors that affect plans • Chapter Three, pages 61-80 <ul style="list-style-type: none"> ▪ Analyses of layout characteristics • Chapter Four, pages 81-111	3

Project 'Transform a kitchen into The ULTIMATE Kitchen	<u>50%</u>
Total	100%

Project-50% of the Term Mark:

Assignment is broken down into 3 parts, (Part A, Part B, and Part C). The written component must be typed and include a cover page including student name, student number, title, index, appendix. Any research quoted must be identified with appropriate punctuation and quotation marks.

Students will be asked to design the Ultimate Kitchen for a 370,000 SF Convention Centre. The Convention Centre will have a 10,000 SF ballroom that will offer seating for dinner for 600 people. There will be pre function space for cocktails and hors d'oeuvres. There are six other meeting room spaces that can bring the total dinner seating to approximately 2,000 seats including the ballroom. The Ultimate Kitchen will be designed to be able to serve a minimum of 2,000 meals. Sample menus will be given out to that will enable the kitchen designer to create the Ultimate Kitchen.

Students will design the Ultimate Kitchen space using principles and lessons learned during the course and based on personal experiences and preferences. A typical drawing plan background will be given out during the course. Students will take the background file and create a drawing plan with an equipment schedule of their preferred kitchen layout using the freeware program Double CAD XT Pro 3 drawing program, the trial program KCL CADalog symbol library and Excel or Access software.

The project deliverables will be based on the following and will be marked out of 100 marks:

- Part A (25 marks)-Laying the groundwork.
 - o Create and describe the goals and standards of the facility.
 - o Determine and calculate the footprint of the kitchen that will be required to serve up to 2,000 meals in one day at full capacity.
 - o Create and determine the capital cost budget for the kitchen.
 - o Create and determine the capital cost budget for portable bar equipment.
 - o Describe the facility and the proposed equipment needs based on the criteria given.
 - o Create and describe the type of Foodservice program that you would use for the serving of these meals.
 - o Create and describe the Planning Team that you would require for the scope of this Project.

- Part B (25 marks)-Foodservice Types.
 - o Create and design the Foodservice cooking system that you would require to serve up to 600 meals in one sitting in the main banquet room and up to 1,700 meals at the same time from the main kitchen if the Convention Centre is at full capacity. Meal

serving periods could be staggered to suit system characteristics but only as much as a client is willing to accept.

- Create and describe the Foodservice program from Receiving, through storage, production, cooking and assembly to Service.
 - Create and list the equipment that you will require for this kitchen.
 - Create and describe the HACCP system that you will use to control the Foodservice operation.
 - Create and describe the bar beverage services that you will require to service the main ballroom and meeting rooms.
- Part C (50 marks)-Basic Plan Design.
- Create a 2D equipment plan with an equipment schedule of the Ultimate kitchen that will meet the criteria noted above.
 - Create and show the required Dry Storage, Beverage, Cold and Frozen Storage, Banquet Storage and auxiliary Equipment Storage areas.
 - Create and show the Food Product flow and Traffic flow of the kitchen.
 - Create and show the equipment within each work station with a numbered equipment schedule referencing each piece of equipment.
 - Create a basic Cut Sheet book showing the reference equipment list of the equipment that was selected for this project.
 - Create basic mechanical and electrical details for each piece of equipment.
 - Create and describe the basic specifications and options for each piece of equipment.
 - Determine and describe the basic criteria for wall, ceiling and floor finishes within the kitchen.
 - Determine and describe the basic criteria for lighting within the kitchen
 - Determine and describe the basic criteria for ventilation with the kitchen.

V **REQUIRED COMPUTER RESOURCES**

Students will be required to be able to create simple 2D equipment layout drawings. Recommended FREE program download of Double CAD XT Pro 3 cad drawing program. Website www.doublecad.com. Program is compatible with KCL CADalog symbol library.

Kochman Consultants Ltd. will provide FREE of charge their latest KCL CADalog of equipment symbols on a 60 day trial basis.

Recommended PDF modifier program to create and mark up PDF files. Program is called Bluebeam and is available in a 30 day FREE trial version. Website is www.bluebeam.com.

VI **REQUIRED TEXTS**

Almanza, B.A., and Kotchevar, L.H., and Terrell, M.E. *Foodservice Planning Layout, Design and Equipment*. (4th Ed.): Prentice Hall

ADDITIONAL REFERENCE MATERIALS

Almanza, B., Kotschevar, L., & Terrell, M. (2000). *Foodservice layout, design and equipment planning*. (4th ed.). Upper Saddle River, NJ: Prentice Hall.

FCSI Europe-Africa-Middle East, edited by, (2007), *Professional Kitchens: planning, design, equipment*. (4th revised and translated ed.). Huss-Medien, Germany.

Gregoire, M. (2010). *Foodservice organizations: A managerial and systems approach* (7th ed.). Upper Saddle River, NJ: Prentice Hall.

Katsigris, C., & Thomas, C. (2009). *Design and equipment for restaurants and foodservice: A management view* (3rd ed.). Hoboken, NJ: Wiley

AND OTHER LEARNING MATERIALS

www.enodis.com

www.garland-group.com

www.clevelandrange.com

www.rational-online.com

www.alto-shaam.com

www.electrolux.com

www.hobart.com

www.championindustries.com

www.truemfg.com

www.delfield.com

www.traulsen.com

www.turbochef.com

www.merrychef.com

www.haltoncompany.com

www.springairsystems.com

www.safetyfirstint.com

VI DELIVERY FORMAT

The class will consist of on line classes. Participation in all class sessions is required for the successful completion of this course.

VII POLICIES AND PROCEDURES

It is the student's responsibility to be aware of the **COLLEGE ACADEMIC REGULATIONS**, and the **School of Hospitality, Recreation and Tourism Policies and Procedures** which can be found on the following websites: humber.ca and hospitality.humber.ca.

VIII ACADEMIC CONCERNS/APPEALS

Any student having an academic concern or questioning an academic decision should first discuss the matter directly with their Professor/Faculty; then with the program coordinator if the issue cannot be resolved; then with the Dean (or designate) if prior two steps were unsuccessful. Please refer to the College's Academic Complaint and Appeal Policy at the web site identified above.

IX PRIOR LEARNING ASSESSMENT AND RECOGNITION (PLAR)

Course credits may be granted in recognition of prior learning, and that application for consideration is made through the Office of the Registrar. Each outline must indicate method(s) of assessment.

<i>Challenge Exam</i>	<i>Portfolio</i>	<i>Skills Test</i>	<i>Interview</i>	<i>Other (Specify)</i>	<i>Not Available For PLAR</i>
					<i>x</i>

X DISCLAIMER

While every effort is made by the Professor/Faculty to cover all material listed in the outline, the order, content, and/or evaluation may change in the event of special circumstances (e.g. time constraints due to inclement weather, sickness, College closure, technology/equipment problems or changes, etc.). In any such case, students will be given appropriate notification in writing, with approval from the Dean (or designate) of the School.