

BERGEN COMMUNITY COLLEGE
Division of Business, Social Sciences, and Public Service
Hotel/Restaurant/Hospitality Department

COURSE OUTLINE
Updated: For Spring, 2011

COURSE TITLE:

HRM 216 – Facilities Planning, Layout and Design

PREREQUISITES:

HRM 101

CREDITS/HOURS:

3 Credits; 2 hours lecture, 2 hours laboratory.

COURSE CLASSIFICATION:

HRM 216 is a proposed Hospitality core course for the AAS degree in the Hospitality Management Curriculum Option, Catering and Banquet Management Curriculum Option, Event Planning and Management Option (proposed), and the Hospitality General Curriculum Option (proposed).

COURSE DESCRIPTION:

HRM 216 - Facilities Planning, Layout and Design includes blueprint interpretation, principles of design and layout rendering to redesign an existing Hospitality facility. This course also focuses on the development of work analysis and flow charts for selection and placement of equipment in production, storage and, in some cases, kitchen and dining areas.

EXPECTED OUTCOMES:

Using guidelines set by the AMERICAN DIETETIC ASSOCIATION, NATIONAL RESTAURANT ASSOCIATION, AMERICAN HOTEL-MOTEL ASSOCIATION, AMERICAN GAS ASSOCIATION and others, textbook, instruction sheets, replicated photographs, and bibliography, students will:

1. Describe the overall system of a given facility;
2. When appropriate, list subsystems which are an essential part of a foodservice;
3. Write procedures for use and care of selected equipment;
4. Plan and render a layout in scale for redesigning all or part of, an existing facility;
5. Observe the rules for materials handling for work simplification;
6. Allocate space to accomplish efficient work, materials, and product flow;

7. Select and place where appropriate, preparation, service and clean-up equipment for optimal utilization of resources;
8. Design office, storage, employee and guest facilities suitable for the redesigned facility;
9. Observe guidelines for environmental and energy control in renderings;
10. Select equipment which will show use of "human engineering";
11. Develop work-analysis and flow charts by interpreting existing blueprints; and
12. Apply principles of layout and design to render a specification sheet of a selected piece of equipment for a specific function.

MEANS OF ASSESSING OUTCOMES:

Each student will be responsible for complete identification of one piece of mobile, auxiliary or stationary equipment rendered as line drawings/sketches in ¼ inch scale showing dimensioned specifications and operating instructions for the use of that piece of equipment.

In addition, students will measure and draw to scale, a complete existing hospitality facility using accepted procedures. All existing fixtures, equipment, supplies and utensils must be indicated. The measuring and drawing should be a group effort, that is, students will work in groups with each person in the group interested in the same type of facility. A project report - a written description of visual observations of the operating facility - must be prepared.

Students will also render an original scale drawing of either:

1. The "heart of the house" or "kitchen" areas and dining facilities. If the chosen foodservice is LARGE, such as a Hospital, Institution, (centralized) or facility with multiple "kitchen" and/or dining facilities (decentralized) then each student in the group may render an integral PART of the facility, and EACH student's drawing must show relationships to the other parts, so as to make a WHOLE; or
2. The "front of the house" or hotel/motel/spa/resort reception area or guest resort or spa facilities indicating that area's relationship to the entire facility.

The drawings will show improvements for a more efficient operation of the facility. Improvements/changes might include:

Structural modifications, repositioning equipment, replacing equipment, adding equipment, repositioning operational or storage

areas, changing traffic or work flow, or a COMPLETE change or replacement.

EVALUATION AND GRADING:

Working within a small group or team, students will be responsible for the following projects:

1. Complete identification of one piece of mobile auxiliary or stationary equipment;
2. Measuring and drawing to scale, one complete existing facility;
3. Preparation of a project report;
4. Modification of the existing facility demonstrated by a complete rendering of that modified or renovated facility.

FINAL GRADES WILL BE ALLOCATED AS FOLLOWS:

Equipment identification & rendering	10%
Scale drawing of existing facility	30%
Completeness of project report	10%
Scale drawing of modified facility	30%
Attendance at visitations	<u>20%</u>
TOTAL	100%

(See also "**PROJECTS TO BE COMPLETED**")

NOTE: In borderline cases, which arise in almost every class each semester, a student's class participation, attitude, and observed effort will be considered in helping to determine the student's final grade.

MATERIALS AND SUPPLIES:

Although not required, a good three-sided scale ruler, a transparent 1/4 inch scale ruler, SHARPENED number 2 pencils, or a retractable drafting pencil, a protractor, a compass, and a supply of 18 inches by 24 inches, 1/4 inch scale graph paper will aid in completing the course requirements.

TEXTBOOK:

Kotchevar, L.H., Terrill, M. E. and Almanza, B. A. Foodservice Planning: layout and equipment, 4th. ed. Prentice-Hall, Upper Saddle River, NJ 2000

LATENESS:

Attendance will be taken at the beginning of class; if the student is not in attendance at that time, he/she will be carried in the roll book as being absent unless the instructor is notified immediately after class.

OTHER COURSE REQUIREMENTS:

When a student is absent from one or more classes, a grade cannot be recorded for those absences or quizzes administered on those days since the student was not there to earn a grade. There will be no make-up exams. However, students will take a comprehensive Final Exam on a make-up day for all missed exams.

The attendance book will be available during the class; be sure to check in, otherwise you will be carried in the roll book as being absent.

If the student's schedule and the instructor's office hours conflict, an appointment must be made to meet with the instructor at a time which is convenient to both. It is the student's responsibility to discuss any problem he/she may have in this course with the instructor as soon as possible, so that counseling, advice and/or tutoring can be arranged if needed. The use of cell phones in class is prohibited. **CELL PHONES MUST BE TURNED OFF WHILE IN CLASS.** If a cell phone rings while a student is in class, the student will be asked to leave and will be considered absent for the day.

If the student **MUST** receive an emergency call during class, the cell phone **MUST** be on vibrate or other noiseless indicator, and the student will leave the class quietly so as not to disturb the instructor or other students. If an emergency call is expected, the student must notify the instructor before the class starts.

Students who require accommodations by the Americans with Disabilities Act (ADA) can request support services from the Office of Specialized Services of Bergen Community College, 201-612-5270 or <http://www.bergen.edu/pages/676.asp>.

PROJECTS TO BE COMPLETED

PROJECT A:

Each student will be responsible for complete identification of one piece of mobile, auxiliary or stationary equipment:

1. Specifications and Line drawings/sketches **IN SCALE**, showing dimensions of at least two of the most critical views.
2. Operating instructions for the use of that piece of equipment.
3. Use that piece of equipment in **PROJECT C**.

PROJECT B:

1. Each student should place him/herself into a group of students having interest in the same type of food service facility, or other setting.
2. Each group of students will measure and draw to scale, one complete existing facility of their choice, using the procedure recommended in the textbook. All existing fixtures, equipment, supplies and utensils must be indicated according to the guidelines set in class and to those outlined in the textbook or other reference books. Further, if a blueprint or plan of the existing foodservice is available, you may copy that plan, in lieu of physical measuring and drawing. **BUT – UNAVAILABILITY OF AN EXISTING PLAN IS NO EXCUSE FOR NON-COMPLETION OF THE PROJECT.**
3. The measuring and drawing should be a group effort. The completed rendering/drawing should be copied, full size, as for blueprints; one copy for each student in the group.
4. Prepare a Project Report: This may be in the nature of a log or notebook, or may be a more formal presentation. It is not necessary to turn in a copy from **EACH** member of the group, just **ONE** group copy is sufficient. The report will be a written description of visual observations of an operation.

PROJECT C :

EACH STUDENT in the group should render an original scale drawing of either:

1. The "heart of the house" or "kitchen" areas and dining facilities. If the chosen foodservice is LARGE, such as a Hospital, Institution, (centralized) or facility with multiple "kitchen" and/or dining facilities (decentralized) then each student in the group may render an integral PART of the facility, and EACH student's drawing must show relationships to the other parts, so as to make a WHOLE; or
2. The "front of the house" or hotel/motel/spa/resort reception area or guest resort or spa facilities indicating that area's relationship to the entire facility.

The drawings will show improvements for a more efficient operation of the facility. Improvements/changes might include: Structural modifications, repositioning equipment, replacing equipment, adding equipment, repositioning operational or storage areas, changing traffic or work flow, or a COMPLETE change or replacement. . Remember that home furnishings, supplies and equipment are not COMMERCIALY or INSTITUTIONALLY acceptable.

GUIDELINES FOR COMPLETING PROJECT "B" and "C":

PLANNING:

Each team must visit a different location from each of the other teams.

Contact an owner or manager of an off-campus or on-campus operation. Request permission, and make appointments for at least two observation sessions.

Ask your contact to inform his/her employees that you are students who have an assignment: to observe skilled employees at work, and to make a report on operations observed. It is important that they know why you are there. Most of the workers so informed will be pleased to have you watch them because they will feel that they are teaching you something - which they will be doing.

Contact a major equipment or furniture manufacturer, requesting equipment and/or furniture, etc. templates in ¼ inch scale for their equipment/furniture to be used by you, a student, to produce a scale drawing of a facilities layout and design for your class at BCC. Each group will contact different manufacturers.

OBSERVATION:

Team Procedure: Allow two observation sessions.

FIRST SESSION:

Get acquainted with work and workers. They should become accustomed to your presence during this time. Go prepared with clipboards, lined paper, and several sharp pencils. A 25 foot tape measure is essential.

Take notes; sketch the outline of the total area; include ALL equipment; draw in as close to scale proportions as possible to make it easier later. Use codes to label all equipment, such as:

R - range
W - worktable
B - bain marie
REC - reception desk
K - keys

Each team member should be responsible for ONE or TWO work centers. Measure and record accurately. Save the drawing, to be completed at a later time in scale.

As soon as possible after the observation period, the team should work together with ALL sketches to produce ONE sketch, of each of the following:

1. Total area
2. Work centers
3. Work areas
4. Work sections
5. Work stations

Then decide upon a plan or procedure for the second session.

SECOND SESSION:

One student in the group should take a clipboard, paper, pencils, tape measure, etc., and keep them ready at all times.

The sketch should be checked quickly and adjusted if there are any great omissions or errors. Obvious checking of the sketch will provide a few minutes for your own adjustment to the situation, and the workers' adjustment to you.

When the observation of a job begins, one student should try to report, in a low tone, the operation, transportation, and flow of materials observed, so that the other students can jot down what is happening, as it happens.

This is essential for plotting work flow.

Observation of each work center, area, etc.

1. Detail the placement of equipment.
2. Detail the work being done, emphasizing:
 - A. Operation
 - B. Transportation
 - C. Volume
 - E. Time
 - F. Number of employees

A voice recorder, used with a low tone, will aid in recording observations, and will be an accurate record when you are miles away trying to remember.

Don't be skimpy on details; they are important to gain a cumulative view of the entire operation. (You may find the use of the THERBLIG delimiters especially useful here.) Example: Count "rests" for the employee as:

1. Pause (brief, momentary);
2. Longer than a pause;
3. Long, sustained period.

SUGGESTIONS FOR SUCCESSFUL VISITS:

1. Observers stay in the background, be unobtrusive at all times.
2. You are there to observe skilled workers at their job; not to take a kitchen tour.
3. Get as far away from the subject as possible, and still see hand and arm motions.
4. With permission, bring chairs to observation point, if possible, and return chair when finished.
5. Make only brief comments to each other; no discussions with each other while in kitchens.
6. No conversations with workers.
7. Be well-groomed, spruce and neat, but DO NOT OVERDRESS.
8. Keep a friendly expression.
9. Do not raise an eyebrow, or show surprise at anything you may see or hear.

YOU MUST ENSURE YOUR WELCOME IF YOU ARE TO BE SUCCESSFUL IN YOUR OBSERVATION.

RESOURCES AND BIBLIOGRAPHY:

Agric. Res. Serv., U.S.D.A. 1968 Layout, Equipment, and work methods for school lunch kitchens and serving lines. Marketing Res. Report No. 753., U.S. Dept of Agric., Washington, DC

American Gas Association. 1989 Commercial Kitchens, 7th ed. American Gas Association, Arlington, VA

Am. Soc. for Hospital Food Serv. Admin. 1976. OSHA reference for food service administrators. Chicago: Am. Hospital Assoc.

Avery, A.C. 1980 A modern guide to foodservice equipment. Boston:CBI

Beer, Ira. Facilities: A new design vocabulary. Restaurant and Hotel Design, Jan/Feb 1983

Berendt, R. D. 1976. Quieting: a practical guide to noise control. Washington, DC. Government Printing Office.

Eaton, Wm. Retail Foodservice: kitchens that work. Restaurant Design, Sum 1982

Giampietro, F. N. n.d. Is your kitchen obsolete? New York, Restaurant Business, Inc.

Green E.F., Drake G.G., and Sweeney F.J. 1978 Profitable food and beverage management:Planning. Ahrens Series. Hayden Book Company, Inc. Rochelle Pk., NJ

Harkness, S.P. and Groom, J.N. 1976 Building without barriers for the disabled. New York:Whitney Library of Design, Watson:Guptill Publications.

Hysen, Paul. Before you buy Equipment. Food Management, Aug 1983

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Nation's Restaurant News. Restaurant Interiors. Each June and October

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Scriven, C.R. and Stevens, J.W. 1989 Manual of Equipment and Design for the Foodservice Industry. Van Nostrand Reinhold, New York, NY

Stokes, J.W. 1977 How to manage a restaurant or institutional food service, 3rd ed. Wm. C. Brown, Co., Dubuque, IA

Tolve, A.P. 1984 Standardizing foodservice for quality and efficiency. New York: AVI/VanNostrand Reinhold Publishing Co.

U.S.D.A. 1974 Equipment guide for on-site school kitchens. Food and Nutr. Service. Program AID no. 1091, U.S. Dept. of Agric., Washington, DC

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COURSE CALENDAR
 HRM-216 Facilities Planning, Layout and Design
 Updated For Spring, 2011

WEEK	DATE	CONTENT	NOTES
1.	_____	Types of facilities and their needs;	_____
2.	_____	Work analysis and simplification;	_____
3.	_____	Human engineering;	_____
4.	_____	Layout analysis and space utilization; Work and traffic flow;	_____
5.	_____	Systems and subsystems; Basic principles of interior design;	_____
6.	_____	First Visitation of Sites or first drawing	
7.	_____	Discuss Site visitation and problems encountered during visitation;	_____
8.	_____	National Sanitation Foundation's role in foodservice equipment selection and care;	_____
9.	_____	Second Visitation of Sites or second drawing	
10.	_____	Planning service areas, offices, sanitation facilities, customer areas, and public areas;	_____
11.	_____	Selection of production, service and storage equipment;	_____
12.	_____	Third drawing	
13.	_____	Planning auxiliary equipment;	_____
14.	_____	Planning bar and beverage areas.	_____
15.	_____	Putting it all together	_____

This Calendar is a guide and subject to change by the instructor.