

University of Puerto Rico
Río Piedras Campus
College of Natural Sciences
Nutrition and Dietetics Program

Course title: Layout Design and Equipment Purchasing for Institutions

Semester: 1st 2018-2019

Course codification / Section: NUTR 4068 / 0U1

Number of credits / hours: Two (2) credits / Three (3) hours per week

Schedule / Classroom: Wednesday 8:00 a.m. – 10:50 a.m. / C- 236

Pre-requisites: NUTR 4031 Food Science

Other requirements:

- a) Computer with access to the Internet
- b) Basic to intermediate computer skills
- c) Calculator
- d) White coat in optimal conditions
- e) Hairnet
- f) Closed shoes with rubber soles

Professor: Carmen M. Pérez-Velázquez, DrPH, MHSN, RDN, LND

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Office hours: Monday and Wednesday 1:00 p.m. – 4:00 p.m.

Office: EFAN 104

Description: Planning and design of the facilities of food service systems. Factors that affect the selection and purchase of institutional equipment. Approach quality standards to develop productivity and work simplification. Principles of hygiene and sanitation applied to food service systems.

Spanish description: Planificación y diseño de las facilidades de sistemas de servicios de alimentos. Factores que afectan la selección y compra de equipos institucionales. Enfoque de estándares de calidad para desarrollar productividad y simplificación de trabajo. Principios de higiene y saneamiento aplicados a los sistemas de servicios de alimentos.

Learning objectives: Upon completion of the course NUTR 4068, each student should have acquired the knowledge and skills to:

1. Document the basic design principles of physical facilities for a foodservice system, establishing physical space requirements and work flowchart.
2. Select the type of foodservice system, schematic arrangement of the kitchen and equipment corresponding to the type of service to be offered, population to be served, physical facilities and budget.
3. Determine the needs, location, use and purchase specifications for institutional teams.
4. Identify new trends in the design of mechanical, service and support equipment.

Cont. Learning Objectives

5. Explain the hygiene, sanitation and safety standards and procedures in a foodservice system.
6. Prepare the processes / steps for the operation, cleaning and maintenance of the institutional equipment.
7. Describe the processes for the conservation of environmental resources applicable to food service systems.
8. Develop a design of a foodservice system operation, incorporating scale models (templates) of the equipment and the operational flow chart.
9. Use available technology to expand knowledge about the issues in discussion.
10. Apply ethical criteria that demonstrate the commitment to promote the responsible use of resources in the planning and design of the facilities of the food service systems.
11. Have a reasonable accommodation for students with special needs and request some type of assistance.

Knowledge requirements for registered dietitian nutritionists (KRDN) covered in this course:

- 2.5 Identify and describe the work of interprofessional teams and the roles of others with whom the registered dietitian nutritionist collaborates in the delivery of food and nutrition services.
- 3.4 Explain the processes involved in delivering quality food and nutrition services.
- 4.1 Apply management theories to the development of programs or services.

Outline of Course Content and Time Distribution:

Session	Topic / Activity	Contact hours
1	Course introduction & syllabus Getting your project started	3
2	Principles of kitchen design Front-of-house atmosphere and design	3
3	Planning back-of-house support areas Electricity and energy management	3
4	Exam #1	3
5	Gas, steam, and water HACCP	3
6	Safety and sanitation Buying and installing foodservice equipment	3
7	Storage equipment: dry and refrigerated Cook-chill technology	3
8	Exam #2	3
9	Preparation equipment: ranges and ovens Free topic	3
10	Preparation equipment: fryers and fry stations Free topic	3
11	Visits	3

12	Preparation equipment: broilers, griddles, and tilting braising pans Free topic	3
13	Steam cooking equipment Free topic	3
14	Dishwashing and waste disposal Miscellaneous kitchen equipment “Visit” assignment due date	3
15	Students’ presentations	3
-----	Exam #3	0*
	Total contact hours	45

*Final exams period

Instructional Strategies: conferences, discussions (higher-level questioning), cooperative learning, students’ presentations, debates, document-based questions, field trips to foodservice equipment industry, and essays.

Minimal Resources Required:

Resource (I = provided by the Institution, S = acquired by the Student)	In-class
Basic to intermediate skills in computer use	S
Access to a computer or mobile device	S
Activated institutional e-mail (upr.edu) account	I
Microsoft Office or compatible equivalent software (Word, Excel, Powerpoint in particular)	S
Access to the distance education platform	I
Speakers, microphone for computer or mobile device	S
Web-cam	N/A
Skype or equivalent audio-video communication software	N/A
Access to broad-band (high velocity) Internet	N/A

Evaluation Strategies:

Attendance, punctuality and class participation	10%
Short exams (quizzes)	10%
Assignments + visit report	10%
Kitchen (back-of-house) design (layout) + oral / written presentation	20%
Exams (3)	50%

Evaluative Grade Scale: Quantifiable with grades of A – F

90 – 100	= A
80 – 89	= B
70 – 79	= C
60 – 69	= D
< 59	= F

Policies:**a) Sending emails to professor**

All emails to professor via Moodle or via email providers should contain the following information in the subject line: Course ID (NUTR 4055), your name and last name. The email should have a salutation line and should have your full name and student number at the end of the email.

b) Class attendance/punctuality, participation, and expectations

Students are expected to attend timely all class meetings. Students should come to class having completed assigned readings and prepared to engage in a lively respectful discussion of key aspects of food purchasing for foodservices systems, as well as readings assigned for the class session. Throughout the semester students will be expected to actively participate in a variety of in-class projects involving debating, document-based questions, and other forms of creative interaction addressing a variety of topics regarded of food purchasing for institutions.

- Respect differences of opinion (classmates, professor, invited lecturers, local constituents, etc.). You are not expected to agree with everything you hear, but you are expected to listen across differences and consider other perspectives with respect.

c) Plagiarism

Your written assignments (printed educational materials and/or oral presentations and posters) should be your intellectual work. Plagiarism, or presenting the words or ideas of another person as your own, is a form of fraud and will not be tolerated. Papers containing plagiarism will automatically receive the grade of "F". Other examples of plagiarism include cutting and pasting from the web – when you are specifically asked to state something in your own words. This is inappropriate even if you cite where you got the information. When you are requested to synthesize the information from a literature source – it must be in your own words and not a quote. The objective is to have the students demonstrate that they can understand the information to present in their own words and specifically designed to specific populations.

d) Academic Integrity

The University of Puerto Rico promotes the highest standards of academic and scientific integrity. Article 6.2 of the UPR Students General Bylaws (Board of Trustees Certification 13, 2009-2010) states that academic dishonesty includes, but is not limited to: fraudulent actions; obtaining grades or academic degrees by false or fraudulent simulations; copying the whole or part of the academic work of another person; plagiarizing totally or partially the work of another person; copying all or part of another person answers to the questions of an oral or written exam by taking or getting someone else to take the exam on his/her behalf; as well as enabling and facilitating another person to perform the aforementioned behavior. Any of these behaviors will be subject to disciplinary action in accordance with the disciplinary procedure laid down in the UPR Students General Bylaws.

-To ensure user data integrity and security, hybrid and distance education courses are offered through the institutional learning management system, which employs secure connection and authentication protocols. The system authenticates the users' identity with the username and password of their institutional accounts. Users are responsible for keeping their password secure and not sharing it with others.

**e) Law of Integrated Educational Services for People with Impediments
(Law 51, June 7, 1996)**

Students who receive Vocational Rehabilitation should communicate with the professor at the beginning of the semester in order to plan for reasonable accommodation and/or acquisition of needed special equipment, according to the recommendations of the Office for Persons with Impediments of the Deanship of Student Affairs (Oficina de Asuntos para las Personas con Impedimentos, OAPI, Decanato de Estudiantes; Circular #9, 2002-2003, DAA).

f) Reasonable Accommodation

The University of Puerto Rico complies with all state and federal laws and regulations related to discrimination, including “The American Disabilities Act” (ADA law) and Law #51 from the Puerto Rico Commonwealth (Estado Libre Asociado de Puerto Rico). Every student has the right to request and receive reasonable accommodation and Vocational Rehabilitation Services (VRS). Those students with special needs that require some type of particular assistance or accommodation shall explicitly communicate it directly to the professor. Students who are receiving VRS services shall communicate it to the professor at the beginning of the semester so that appropriate planning and the necessary equipment may be requested according to the Disabilities Persons Affairs Office (Oficina de Asuntos para las Personas con Impedimentos (OAPI)) from the Students’ Deanship office. Any other student requiring assistance or special accommodation shall also communicate directly with the professor. Reasonable accommodations requests or services DO NOT exempt the student from complying and fulfilling academic and course related requirements and responsibilities.

g) Alternative Methods of Teaching

La Certificación Núm. 112 (2014-2015) de la Junta de Gobierno define un curso presencial como un curso en el cual 75% o más de las horas de instrucción requieren la presencia física del estudiante y el profesor en el salón de clases. Esto quiere decir que 25% de un curso presencial, pudiera ofrecerse sin requerir la presencia física de los estudiantes y el profesor en el salón de clases. En caso de ser necesario, este curso podrá completar hasta 25% de las horas contacto (11.25 horas) de forma no presencial por métodos alternos como por ejemplo: Video-conferencias, módulos instruccionales, foros de discusión y cibercharlas entre otros. De ser así, se modificará el calendario/temario para incluir los temas que serán cubiertos por métodos alternos.

Required text

Thomas, C., Norman, E. J. & Katsiris, C. (2014). *Design and Equipment for Restaurants and Foodservice.*, 4th ed. New York: John Wiley & Sons.
ISBN for Hardcover: 978-1-118-29774-2

Bibliography

American Psychological Association. (2009). *Publication Manual of the American Psychological Association*, 6th ed. Washington DC: American Psychological Association.

Drysdale, J. A. (2009). *Restaurant Foodservice Equipment*. New Jersey: Pearson Prentice Hall.
Kansas: Hospitality Publications.

- Drysdale, J. A. (2002). *Foodservice Equipment: Operation Sanitation and Maintenance*.
- Knight, J. & Kotschevar, L. (2000). *Quantity Food Production, Planning and Management* 3rd ed. New York: John Wiley & Sons.
- Labensky, S.R. (1998). *Applied Math for Food Service*. New Jersey: Prentice Hall.
- Loken, J. (1995). *The HACCP Food Safety Manual*, 1st ed. New York: John Wiley & Sons.
- Parker-Puckett, R. (2012). *Foodservice Manual for Health Care Institutions*, 4th ed. New York: John Wiley & Sons.
- Payne-Palacio, J. & Theis, M. (2012). *Foodservice Management: Principles and Practices*, 12th ed. New Jersey: Pearson Prentice Hall.
- Spears, M.C. & Gregorie, M.B. (2009). *Foodservice Organizations-A Managerial and Systems Approach*, 8th ed. New Jersey: Prentice Hall
- Torres, L. (2002). *Estrategias de investigación para la inclusión*. San Juan, PR: Isla Negra.
- Walker, JR. (2013). *The Restaurant: From Concept to Operation*, 7th ed. New York: John Wiley & Sons.

Journals / Magazines

- Equilibrium, Colegio de Nutricionistas y Dietistas de Puerto Rico
- Food & Hospitality World, magazine
- Food Management, online magazine
- Journal of Food Protection
- Journal of Foodservice, Wiley online library
- Journal of Foodservice Business Research
- Journal of International Food & Agribusiness Marketing
- Journal of the Academy of Nutrition and Dietetics
- Restaurants and Institutions, magazine (last issue was in April 2010)
- Restaurant Business, online magazine

Other references

- Baxter, <https://www.baxtermfg.com>
- FDA Food Code, <https://www.fda.gov/food/guidanceregulation/retailfoodprotection/foodcode/>
- Foodservice Equipment Journal, <http://www.foodserviceequipmentjournal.com>
- Hubert, <https://www.hubert.com>
- Manufacturing.Net, <https://www.manufacturing.net>
- National Restaurant Association, <http://www.restaurant.org/Home>
- Vulcan, <http://www.vulcanequipment.com>