The Hong Kong Polytechnic University

Subject Description Form

Subject Code	ABCT4415
Subject Title	SANITATION AND FOOD HYGIENE MANAGEMENT
Credit Value	2
Level	4
Pre-requisite	Food Microbiology (ABCT3405)
Co-requisite	Nil
Objectives	This subject aims to foster students' understanding and appreciation of food hygiene and safety management. Emphasis is put on food hygiene and safety standards required for licensed food premises in Hong Kong (such as cleaning, sanitation, and pest control operations) as well as an internationally recognized food safety management system namely hazard analysis and critical control points (HACCP).
Intended Learning Outcomes	Upon completion of this subject, students should be able to: (a) clearly understand food hygiene & safety standards required for licensed food premises in Hong Kong; (b) recognize the fundamentals of food hygiene management, especially for cleaning, sanitization as well as pest control operations in food processing and manufacturing industry; (c) appreciate the major features of HACCP; (d) demonstrate practical proficiency in developing a HACCP plan for a food manufacturing plant; (e) demonstrate critical thinking as well as problem solving skills
Subject Synopsis/ Indicative Syllabus	<u>Role of the Food Industry in Food Hygiene & Safety Management; Duties of Hygiene Manager/Supervisor (2 hrs)</u> Legal responsibility - "Food Hygiene Code"; worker safety and accident prevention by the food companies and food premises; the importance of consumer trust and product reputation. <u>Risk-based Inspection System (Risk Classification of Food) (1 hr)</u> (i) Ready-to-eat-food; (ii) High risk food; (iii) High risk foods that are ready-to-eat (iv) High risk foods that are not ready-to-eat (v) Medium risk food (vi) Medium risk foods that are ready-to-eat (vii) Medium risk foods that are not ready-to-eat (viii) Low risk food <u>General Design and Construction of Food Premises (1 hr)</u> Licensing of food premises; layout; kitchens and food rooms; walls and ceilings; floors; floor drains; water supply; handwashing facilities; scullery facilities; toilet facilities; toilet facilities; sewage and waste water disposal; grease traps; waste storage; ventilation; equipment; lighting <u>Cleaning (2 hrs)</u> Classification of cleaning compounds; detergency; selection and formulation of typical cleaners; cleaning equipment; CIP, COP and other cleaning technologies.

Sanitization (2 hrs)
Sanitizing methods; classification of sanitizing agents; properties and applications of chemical sanitizers; sanitizer strength; sanitizing equipment; sanitizer precautions; environmental sanitation and maintenance.

Pest Control (2 hrs)
Pests of major concern in food industry; characteristics of pest contamination sources and pest infestation; chemical and mechanical techniques for control of rodents, cockroaches and other insects; commonly used pesticides and their precautions; integrated pest management.

Safe Food Handling, Equipment and Utensils, Personal Health, Hygiene and Training of Food Handlers (2 hrs)
Food sources; food receiving; food storage; food handling; food displaying and serving; time as a safety control; food packaging; food transportation; food disposal; equipment, utensils and linens; personal health and illnesses; personal hygiene; personal hygiene training of food handlers

Food Hygiene Standard Certification Scheme (2 hrs)
Introduction of a novel Food Hygiene Standard Certification Scheme for Catering Industry

Hazard and Critical Control Point (HACCP) (12 hrs)
Introduction of HACCP; preparation of HACCP; designing safety into products and processes; developing HACCP plan; hazard analysis chart; developing HACCP control chart; implementation of HACCP

Teaching/Learning Methodology

Interactive lectures and guided readings are used to facilitate communication between lecturer and students, and also to enhance students in comprehending the taught topics. Tutorials are designed to assist students to re-think the previous learning process for consolidating the key concepts. A plant visit to a local food processing plant would be arranged in order to provide students with exposure on real-life food hygiene management. A problem-based learning in the form of a mini-project (e.g. to design a HACCP plan for a local food manufacturing plant) is used to develop students' abilities to integrate and apply the knowledge acquired as well as to foster their skills in problem-solving and critical thinking. Students' learning outcomes are ascertained by a variety of assessment tools.

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)					
		a	b	c	d	e	
A quiz	20	√	√			√	
A mini-project	50			√	√	√	
Examination	30	√	√	√	√	√	
Total	100 %						

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

Students are assessed by both Continuous Assessment and Examination components. Continuous Assessment is based on a quiz (20%), and a mini-project (50%). The mini-project is used to assess students' abilities to integrate and apply the knowledge acquired as well as their skills in problem-solving and critical thinking. The quiz and final

	examination are used to assess the knowledge acquired by students from lectures and other learning outcomes expected.	
Student Study Effort Required	Class contact:	
	▪ Lecture	22 Hrs.
	▪ On-site Plant Visit	64 Hrs.
	Other student study effort:	
	▪ An individual project assignment	62 Hrs.
	Total student study effort	88 Hrs.
Reading List and References	Essential McSwane D, Rue N and Linton R. Food Safety & Sanitation; Prentice Hall 2003 Supplementary Codex Alimentarius. Food Hygiene: Basic Text; FAO/WHO Food Standards 2003 Food and Environmental Hygiene Department. Food Hygiene Code; Hong Kong Government 2003 Longree K and Armbruster G. Quantity Food Sanitation; Wiley 1996 Mortimore, S. HACCP; Blackwell Science 2001	