The Hong Kong Polytechnic University

Subject Description Form

Subject Code	FSN3408 (ABCT3408)			
Subject Title	SENSORY EVALUATION OF FOOD			
Credit Value	2			
Level	3			
Pre-requisite	Basic Statistics (AMA1006) or Basic Mathematics – An Introduction to Algebra and Differential Calculus (AMA1100)			
Objectives	This subject aims to develop students' understanding of the fundamentals upon which food sensory evaluation is based. Emphasis is placed on the methods for sensory tests, statistical analysis and interpretation of the testing results. The facilities required for sensory tests, forming of test panels and factors influencing the test will be introduced to students. The opportunity to integrate theory into practice will also be provided through laboratory works and a mini-project.			
Intended Learning Outcomes	Upon completion of the subject, students will be able to: (a) understand the fundamental requirements and procedures of food sensory evaluation; (b) select the appropriate test methods when presented with a practical problem; (c) apply statistical principles to food sensory evaluation; (d) demonstrate practical proficiency in a food sensory evaluation laboratory; (e) appreciate the importance of teamwork, problem solving and critical thinking			
Subject Synopsis/ Indicative Syllabus	Introduction 4 hours Definition of sensory evaluation; basic tastes; human senses and sensory perception; threshold; psychophysics			
	Arrangements for Sensory Evaluation2 hoursTest controls: environment and test room design; product controls: samplepreparation and presentation; panelist controls; factors influencingmeasurements: psychological and physiological errors			
	Statistical AnalysisMean; mode; median; range and dispersion, variance and standard 4 hoursdeviation; normal distribution; z score, Student's t test; ANOVA;multiple comparisons test; testing hypothesis; level of significance; type Iand II errors.			
	<u>Methods for Sensory Evaluation</u> Classification of test methods; discrimination tests: paired-comparison, 14 hours duo-trio and triangle tests; affective tests: qualitative (interview and focus group) and quantitative tests (paired preference and acceptance tests); descriptive analysis: Favor Profile [®] , Texture Profile [®] , Quantitative Descriptive Analysis [®] , Spectrum [™] Descriptive Analysis			
	Applications of Sensory Analysis in the Food Industry Quality control; storage stability testing; product development and 2 hours consumer acceptance testing.			
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. External speaker(s) from the local food industry is/are invited to give seminar(s) on their current practices of food sensory evaluation in Hong Kong. Tutorials are designed to assist students to re-think the previous learning process for consolidating the key			

	concepts. Hands-on laborate practical proficiency and evaluation. For problem-ba implement the whole set presentation is used to stren	ory is used to capability in sed learning, of food sen ogthen their co	suppler n condu student nsory e ommuni	ment the acting of s are recovaluation cation s	e lecture differen quired t on on t kills an	es and to it kinds to form their ov id teamy	o develo o of foo groups, wn. Grc work.	p students' od sensory design and oup project	
Assessment Methods in Alignment with Intended Learning Outcomes	Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)						
			а	b	c	d	e		
	Quiz	20	\checkmark	\checkmark	\checkmark				
	Laboratory reports	10	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		
	A group project presentation + A group report	40	V	V	V	V	\checkmark		
	Examination	30		\checkmark	\checkmark				
	Total	100 %		•	•	4			
Student Study	Students are assessed by both Continuous Assessment and Examination components. Continuous Assessment is based on a quiz (20%), laboratory reports (10%) and a group project presentation and report (40%). The group 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.								
Effort Required	Lecture 20 Hrs.								
	Seminar /Tutorial						2 Hrs.		
	Laboratory						6 Hrs.		
	Other student study effort:								
	A group project presentation + A group report						56 Hrs.		
	Lab reports						6 Hrs.		
	Total student study effort					90 Hrs.			
Reading List and References	Essential Meilgaard MC, Civille GV & Carr BT. Sensory Evaluation Techniques (4th ed.); CRC Press 2007								
	Supplementary Lawless HT. Sensory Evalu 1999 O'Mahony M. Sensory Eval Dekker 1986 Larmond F. Laboratory Me	uation of Food luation of Foo thods for Sen	l: Princi od: Stati	ples and stical M aluation	d Practi Iethods	ces; Cha and Pro	apman & ocedures	k Hall ; M Canada	

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Stone H & Sidel JL Sensory Evaluation Practices (3rd ed.) Elsevier Academic Press 2004