The Hong Kong Polytechnic University

<u>Subject Description Form</u>

Subject Code	FSN6007
Subject Title	Advanced Interdisciplinary Research in Food Science, Nutrition and Chinese Medicine
Credit Value	3
Level	6
Pre-requisite/ Co-requisite/ Exclusion	Nil
Objectives	This course aims to provide new techniques, concepts and innovations in Food Science, Nutrition and Chinese Medicine
Intended Learning Outcomes	Upon completion of the subject, students will be able to: a) Learn the advanced interdisciplinary knowledge, popular research topics and cutting-edge techniques in the fields of Food Science, Nutrition and Chinese Medicine b) Understand the fundamental knowledge of selected natural products and Chinese medicinal materials and appreciate their applications in food science, nutrition and pharmacological research c) Equip new techniques and innovative approaches in food product development and value-added technology advancement d) Design and plan experiments by applying theoretical methods, concepts, and experimental techniques /equipment.
Subject Synopsis/ Indicative Syllabus	<u>Trendy Topics in Food Science, Nutrition and Chinese Medicine</u> • Smart food technology and functional food product development • Recent advances in analytical approaches and multi-omics techniques • Emerging trends in sustainable food systems • Gut microbiota and its role in nutrition, human health and disease • Plant-based diets and their impact on health and the environment • Nutritional strategies for promotion of healthy ageing and mental health • Integrative approaches to the management of chronic diseases using Chinese medicine and modern medicine • Herbal pharmacology and mechanisms of action of Chinese medicine • Recent progress in authentication, standardization and modernization of Chinese medicine

Teaching/Learning Methodology	Lectures
(Note 3)	To acquire general and basic concepts and understandings of the subjects using an interactive approach.
	Tutorials
	To review the literatures, discuss the research questions and design experiments.
	Assignments and Examination
	To understand the basic and theories
	Self-study
	Students will be given a reading list of research papers.

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		
1. Attendance	10	√	√	√	√		
2. Written assignment	40	√	√	√	√		
3. Examination	50	√	√	√	√		

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

Attendance:

Students' active participation and engagement with the learning activities will be part of the assessment of the subject.

Written assignment:

Students will evaluate, discuss, and present the research findings of research articles on a selected research topic in the form of written reports. Their ability to present ideas and arguments coherently and persuasively using appropriate academic English will also be assessed.

Examination

This is a major assessment component of the subject which will be used to test the students' overall understanding of all intended learning outcomes and problem-solving skills.

Student Study Effort Expected	Class contact:	
	▪ Lecture/Tutorial	39Hrs.
	Other student study effort:	
	▪ Self-study (literature search and reading)	69Hrs.

	▪ Assignment writing	12Hrs.
	Total student study effort	120Hrs.
Reading List and References	Related literature references in PubMed	