

Subject Description Form

Subject Code	FSN1002
Subject Title	Basics of Food Science
Credit Value	3
Level	1
Pre-requisite	NIL
Co-requisite	NIL
Exclusion	FSN2416 Introduction to Food Science; AND FSN1D08 Food Safety: From Farm to Fork
Objectives	a. The subject aims to offer an overview to the diverse areas within food science. The subject will begin with the introduction of chemical make-up of food, followed by the manipulation of such to produce tasty and safe food. Students will explore essential topics related to food science and technology, gaining insights into how these principles are applied in real-world scenarios.
Intended Learning Outcomes	Upon completion of the subject, students will be able to: - identify the major nutrients and chemical components in different food products; - realise the essentials in maintaining food safety; - explain the food chain and technology of food processing; - develop analytical, critical thinking, and written communication skills.
Subject Synopsis/ Indicative Syllabus	Basics of Food Science: Overview of food and health, chemical make-up of food; food microbiology; food processing methods; food behaviour during cooking; food supply chain and sustainability; Basics of Food Safety: Food spoilage, processing and hygiene; Microbiological and Toxicological considerations of food Basics of Food innovation: food product development and sensory science.
Teaching/Learning Methodology	The core content of this subject will be delivered through a variety of educational resources, including lecture notes, online videos, in-class case studies, the Blackboard platform, and other instructional tools. Lectures will feature discussions on broad topics designed to engage and inspire students' interest in the fields of food and nutritional sciences. To enhance learning, students will engage in small-group discussions to apply their knowledge of food science to real-world situations. A diverse range of assessment methods, including quizzes and assignments, will be employed to cultivate students' analytical abilities, critical thinking, and

	communication skills.
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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. Assignments	20%	√	√	√	√	
	2. Tests	30%	√	√	√	√	
	3. Examination	50%	√	√	√	√	
	Total	100 %					
Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes: Assignments, tests, and examinations serve as tools to measure students' understanding of the foundational concepts in food science. Students' performance in tutorials and class assignments will be evaluated to determine their ability to apply the knowledge gained to everyday situations and to critically analyze complex, food-related issues. This approach ensures that students not only grasp theoretical concepts but also develop practical skills in addressing real-world challenges in the field of food science.							
Student Study Effort Required	Class contact:						
	▪ Lecture				26 Hrs.		
	▪ Tutorial				10 Hrs.		
	▪ Presentation				3 Hrs.		
	Other student study effort:						
	▪ Self study				82 Hrs.		
	Total student study effort				121Hrs		
Reading List and References	1. Judith E. Brown, Nutrition Now. 8th edition, Cengage Learning, 2017 2. Vaclavik, Vickie A. & Christian, Elizabeth W. Essentials of Food Science, 3 rd edition. Springer, 2008						