Liverpool John Moores University

Title:	Food Technology and Development
Status:	Definitive
Code:	**5004SPS** (129017)
Version Start Date:	01-08-2021
Owning School/Faculty:	Sport and Exercise Sciences
Teaching School/Faculty:	Sport and Exercise Sciences

Team	Leader
Abdulmannan Fadel	Y
Wendy Johnston	

Academic Level:	FHEQ5	**Credit Value:**	20	**Total Delivered Hours:**	40
Total Learning Hours:	200	**Private Study:**	160		

Delivery Options
Course typically offered: Semester 2

Component	Contact Hours
Lecture	20
Workshop	20

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Report (2000 words)	40	
Presentation	AS2	Group Presentation (25-minute)	60	

Aims

This module aims to provide an understanding of the technology, techniques and processes involved in turning raw materials into safe nutritious foods. The module will focus on technological advancements in the industry to help improve the nutritional quality of foods. The module will provide students with an understanding of food production and manufacturing techniques and will discuss selection, production, processing, preservation, packaging, labelling, waste management and

quality management of safe nutritious food. Workshop sessions will provide opportunities for the practical exploration of food technologies. The combination of theory and practice will promote the development of both theoretical and practical skills.

Learning Outcomes

After completing the module the student should be able to:

1 Identify and evaluate recent advances in the development of safe food practices throughout the food chain.
2 Investigate and explore the functionality of food components from a food science perspective and to link theory with practice.
3 Identify and explain current technological advancements within the food industry, which are involved in turning raw materials into safe nutritious foods.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Report (2000 words)	1	2
Group Presentation (25-minute)	1	3

Outline Syllabus

Food Technology and Nutrition:
Food processing technologies; Food safety; Food chemistry; Food preservation; Food packaging and labelling.

Exploration of food technology and nutrition:
Yogurt; Cheese; Ice cream; Pasteurised juice; Alternative proteins; Fermentation; Preservation; Mayonnaise; Butter; Yeast products.

Learning Activities

Key theory will be delivered through a range of lectures, workshops, guest speakers and online materials. Workshops and practical investigations will support the key theory and allow students to explore and investigate food technology and nutrition. Activities will be student centred and allow students to work individually and as part of a group.

Notes

The Association for Nutrition (AfN) competencies covered in this module include:
CC1q Theories of and development of practical skills in communication and learning
CC2b Effect on chemical composition and nutritional quality of food, feed and diet for

either human or animal systems of: - methods of food or feed production, preparation, preservation, fortification and format - sources of food or feed supply - methods of cooking and storage
CC2c Familiarity with and/or development of practical skills involved in the methods to analyse the composition of foods or feeds
CC2e Understanding of issues associated with food or feed sustainability.
CC4f Understanding the general principles and methods associated with determining the efficacy, health attributes, health claims, safety, and legal aspects of foods, feeds, drinks and supplements for either human or animal systems.
CC4h Ability to integrate knowledge and understanding from a variety of sources to identify or propose solutions in one of the following areas: Improvement of human health or improvement of the welfare and/or productivity of animals or improvement of food production and sustainability
CC2a Food or feed commodities (staple foods, main sources of key nutrients, novel sources etc.) within UK and/or internationally for either human or animal systems.
CC3f Theories and application of methods of improving health, behaviour and change for either human or animal systems.
CC2d Ability to formulate ideas and opinions concerning foods or feeds, nutrients, nonnutrient components of food and nutrition effectively and appropriately for either human or animal systems.