

AGRI S7007: Value Added Food Products for the Food Industry

Module Details	
Module Code:	AGRI S7007
Full Title:	Value Added Food Products for the Food Industry APPROVED
Valid From::	Semester 1 - 2019/20 (June 2019)
Language of Instruction:	English
Duration:	1 Semester
Credits::	5
Module Owner::	Edel Healy
Departments:	Unknown
Module Description:	This module aims to provide students with an appreciation of the food science and technological requirements needed for the production, processing and packaging of value added food products. It will also enable them to assess the legal and regulatory requirements for functional, artisan and organic food production.

Module Learning Outcome	
On successful completion of this module the learner will be able to:	
#	Module Learning Outcome Description
MLO1	Appraise the drivers of consumer demand in relation to value-added food products
MLO2	Identify and integrate scientific, commercial and technological knowledge needed in the manufacture of value added and artisan food products.
MLO3	Identify and interpret the various legal, quality assurance and safety regulations in relation to the manufacture and sale of value added food products.
MLO4	Evaluate the principles for the conversion and registration requirements needed in switching from conventional to organic farming.
Pre-requisite learning	
Module Recommendations	
<p><i>This is prior learning (or a practical skill) that is strongly recommended before enrolment in this module. You may enrol in this module if you have not acquired the recommended learning but you will have considerable difficulty in passing (i.e. achieving the learning outcomes of) the module. While the prior learning is expressed as named DkIT module(s) it also allows for learning (in another module or modules) which is equivalent to the learning specified in the named module(s).</i></p>	
No recommendations listed	

Module Indicative Content
Drivers of consumer demand Health and wellness; sustainable food production; animal welfare; food safety and quality; food traceability; convenience; lifestyle issues.
Food innovation Concepts, market research, financial feasibility, ingredients sourcing, formulation, trial production, test marketing, batch production, industrial scale production
Value added food production Preparation and production of a selection of value added food products from the dairy, meat, fruit, vegetable and ready made meals industries.
Functional foods and food ingredients Effect of diet on obesity, cardiovascular disease, cancer, diabetes, anaemia and bone health. Probiotics, prebiotics, synbiotics and nutraceuticals: assessment of intake, bioavailability, mechanism of action, safety, methods of production and storage. Incorporation into food of the following functional ingredients: casein, whey protein concentrate, butteroil, Omega 3 and 6 fatty acids, emulsifiers, stabilisers, conjugated linoleic acid, phytosterols, soya protein, antioxidants, phytochemicals, Iron and folate.
Organic production and processing EU Organic Production Standards. Inspection, certification and registration requirements needed by Organic Certification Bodies (OCBs): Irish Organic Farmers and Growers Association (IOFGA), Organic Trust Ltd., Demeter Standards and DAFM. Organic meat, fruit and vegetable processing.
Artisan food products Role of small-scale food production for local markets in sustainable agriculture. Batch systems for production and packaging of various artisan products e.g. dairy, meat, preserves, baking and confectionary, fruit and veg.
Regulation and quality assurance Hygiene, safety, quality assurance, traceability and labelling requirements at point of sale for various artisanal food products.
Site visit Visit to an Organic farm or to value added food processors e.g. Abbotts, Ryevally, Liffey Meats/ ABP, TMC Ltd

Module Assessment	
Assessment Breakdown	%
Course Work	50.00%
Final Examination	50.00%
Module Special Regulation	

Assessments

Full Time On Campus			
Course Work			
Assessment Type	Continuous Assessment	% of Total Mark	50
Marks Out Of	0	Pass Mark	0
Timing	Every Second Week	Learning Outcome	1,2,3
Duration in minutes	0		
Assessment Description	Factory visit based assignment (1500-2000 words)		
No Project			
No Practical			
Final Examination			
Assessment Type	Formal Exam	% of Total Mark	50
Marks Out Of	0	Pass Mark	0
Timing	End-of-Semester	Learning Outcome	2,3,4
Duration in minutes	0		
Assessment Description	End-of-Semester Final Examination		
Reassessment Requirement			
A repeat examination			
Reassessment of this module will consist of a repeat examination. It is possible that there will also be a requirement to be reassessed in a coursework element.			

Module Workload

Workload: Full Time On Campus

<i>Workload Type</i>	<i>Contact Type</i>	<i>Workload Description</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>	<i>Hours</i>
Lecture	Contact	Relating to course content	Every Second Week	1.50	3
Practical	Contact	Industry Visits	Once per semester	1.00	15
Online Contact	Contact	No Description	Every Second Week	1.50	3
Directed Reading	Non Contact	No Description	Every Week	1.00	1
Independent Study	Non Contact	No Description	Every Week	1.00	1
				Total Weekly Learner Workload	6.00
				Total Weekly Contact Hours	4.00

This module has no Part Time On Campus workload.

Module Resources

Recommended Book Resources

Bagci, C. Lau, F.C. Ghosh, C.K.. (2010), Biotechnology in Functional Foods and Nutraceuticals, 2nd. CRC Press, [ISBN: 9781420087116].
Brody, Aaron L Lord & John B.. (2000), Developing new food products for a changing marketplace, ,, Technomic Publications, [ISBN: ISBN: 1566767].
Fuller, Gordon W.. (1994), New food product development : from concept to marketplace, CRC Press, [ISBN: ISBN: 0849380].
Gibson, Glenn R; Williams & Christine M.. (2000), Functional foods : concept to product, CRC Press Woodhead Publications, [ISBN: ISBN: 1855735].
Wildman, E.C.. (2006), Handbook of Nutraceuticals and Functional Foods- Concept to Product, 2nd. CRC Press, [ISBN: 9780849364099].

Supplementary Book Resources

Teagasc. (2002), Principles of Successful Organic Farming, Teagasc.
Organic Centre Wales. (2009), Organic Farm Management Handbook, University of Aberystwyth.
Newton J.. (2004), Profitable Organic Farming, Blackwell publishing.

This module does not have any article/paper resources

Other Resources

Website, Food Safety Authority of Ireland. FSAI homepage,
<http://www.fsai.ie/home.html>
Website, Teagasc. Teagasc guide to artisan food production,
<https://www.teagasc.ie/rural-economy/organics/>
Website, Artisan Forum, Food Safety Authority of Ireland,
http://www.fsai.ie/about_us/industry_for_a/artisan_forums.html