

## AGRI S7004: Packaging of Food Products

Module Details	
Module Code:	AGRI S7004
Full Title:	Packaging of Food Products <b>APPROVED</b>
Valid From:	Semester 1 - 2018/19 ( September 2018 )
Language of Instruction:	English
Duration:	1 Semester
Credits:	5
Module Owner:::	Edel Healy
Departments:	Unknown
Module Description:	This module introduces and develops knowledge and understanding of food packaging. Traditional and innovative food packaging types and systems will be studied. Food packaging legislation will be applied.

Module Learning Outcome	
On successful completion of this module the learner will be able to:	
#	Module Learning Outcome Description
MLO1	Discuss the appropriateness of existing and innovative food packaging materials and systems
MLO2	Assess the effects of packaging on food quality and shelf-life.
MLO3	Apply the requirements of current food packaging legislation in the specification of appropriate food packaging.
Pre-requisite learning	
<p><b>Module Recommendations</b>  <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	

<b>Module Indicative Content</b>
<b>Introduction to food packaging and food preservation</b> The module will be introduced with an overall view of food packaging and food preservation.
<b>Traditional Primary Packaging</b> Types of packaging - polymers, glass, metal, cellulosic packaging, and their production, properties, specifications, types of food products, effects on quality and shelf-life, migration and food product interactions.
<b>Packaging Operations and Technology</b> Filling, closing, wrapping and bagging, form-fill-seal, contact/contour packaging, secondary and tertiary packaging systems, aseptic packaging systems.
<b>Novel and innovative packaging</b> Vacuum/modified atmosphere packaging, controlled atmosphere packaging, microwavable packaging, active packaging, intelligent packaging, nanotechnology, edible packaging.
<b>Food Packaging Legislation</b> Current EU and Irish legislation in relation to packaging of food products and packaging waste.HACCP

## Module Assessment

<b>Assessment Breakdown</b>	<b>%</b>
Course Work	50.00%
Final Examination	50.00%

<b>Module Special Regulation</b>

### Assessments

#### Full Time

<b>Course Work</b>			
<b>Assessment Type</b>	Continuous Assessment	<b>% of Total Mark</b>	50
<b>Marks Out Of</b>	0	<b>Pass Mark</b>	0
<b>Timing</b>	Week 10	<b>Learning Outcome</b>	3
<b>Duration in minutes</b>	0		
<b>Assessment Description</b> Food Packaging Legislation. The group assessment involves well defined instructions and guidelines. Groups will be small (ideally 4) and teacher selected. On submission of assessment the students will be asked to sign a submission sheet stating that everyone in the group participated equally or otherwise. The group project will be graded by the lecturer. The final individual student result will be a combination of this result plus a percentage mark will be allocated to the group for peer marking.			

No Project
------------

No Practical
--------------

<b>Final Examination</b>			
<b>Assessment Type</b>	Formal Exam	<b>% of Total Mark</b>	50
<b>Marks Out Of</b>	0	<b>Pass Mark</b>	0
<b>Timing</b>	End-of-Semester	<b>Learning Outcome</b>	1,2,3
<b>Duration in minutes</b>	0		
<b>Assessment Description</b> End-of-Semester Final Examination			

<b>Reassessment Requirement</b>
<b>A repeat examination</b> <i>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.</i>

**Module Workload**

<b>Workload: Full Time</b>					
<i>Workload Type</i>	<i>Contact Type</i>	<i>Workload Description</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>	<i>Hours</i>
Directed Reading	Non Contact	No Description	Every Week	3.00	3
Independent Study	Non Contact	No Description	Every Week	3.00	3
Lecture	Contact	No Description	Every Second Week	2.00	4
Online Contact	Contact	No Description	Every Second Week	2.00	4
Total Weekly Learner Workload					10.00
Total Weekly Contact Hours					4.00
<b>This module has no Part Time workload.</b>					

## Module Resources

### *Recommended Book Resources*

- D.S. Lee, K.L. Yam, L. Piergiovanni. (2008), Food Packaging Science and Technology, CRC Press, [ISBN: 9780824727796].
- R. Coles, D. Mc Dowell, M.J. Kirwan. (2003), Food Packaging Technology, Blackwell Publishing, [ISBN: 9781405189101].
- D.J. Knight. (2004), Regulations of Food Packaging in Europe and the USA, Rapra Tech. Ltd., [ISBN: 9781859574713].

### *Supplementary Book Resources*

- J.H. Han. (2005), Innovations in Food Packaging, Elsevier Academic Press, [ISBN: 0123116325].
- N.N. Potter, J.H. Hotchkiss. (1999), Food Science, 5. Kluwer Academic/Plenum Publishers, [ISBN: 9780834212657].

*This module does not have any article/paper resources*

### *Other Resources*

[Website], [www.foodandbeveragepackaging.com](http://www.foodandbeveragepackaging.com).

[Website], [www.packagingdigest.com](http://www.packagingdigest.com).

[Website], [www.europa.eu](http://www.europa.eu).

[Website], [www.attorneygeneral.ie](http://www.attorneygeneral.ie).

[Link], Library Catalogue,  
<http://tinyurl.com/k6vua5s>

[Link], Library Catalogue,  
<http://tinyurl.com/lx8kk8l>