

## AGRI S7011: Advanced Livestock Management

Module Details	
Module Code:	AGRI S7011
Full Title:	Advanced Livestock Management <b>APPROVED</b>
Valid From::	Semester 1 - 2021/22 ( September 2021 )
Language of Instruction:	English
Duration:	1 Semester
Credits::	7.5
Module Owner::	<ul style="list-style-type: none"><li>• Siobhan Jordan</li><li>• John(science) Doherty</li><li>• John Kelly</li><li>• Marie McGlynn</li><li>• Liam McWeeney</li><li>• Breda Brennan</li><li>• Liam McWeeney</li></ul>
Departments:	Agriculture, Food and Animal Health
Module Description:	This module aims to provide the learner with a thorough understanding of the key principles of profitable and sustainable livestock production with due regard for animal health, welfare and environmental considerations.

Module Learning Outcome	
On successful completion of this module the learner will be able to:	
#	Module Learning Outcome Description
MLO1	Describe the main markets, market requirements and how systems of production improve their sustainability in meeting market expectations and climate change targets.
MLO2	Discuss the feeding and management requirements of beef, sheep and dairy production systems while optimising sustainable output and animal health.
MLO3	Recognise the role of evolving breeding tools as the basis for breeding fertile and healthy animals capable of maximising production from grazed grass.
MLO4	Discuss disease control strategies for beef, sheep and dairy production systems and the how antimicrobial resistance and bio security fit within these strategies.
MLO5	Perform tasks associated with beef, sheep and dairy production.
Pre-requisite learning	
<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>	
No recommendations listed	

Module Indicative Content
<b>Beef Husbandry and Management</b> Feeding and nutrition of beef animals including the suckler cow, and using body condition scores as a management tool Weaning management Breeding replacement females and targets for production and fertility Management practices to improve herd fertility. Breeding indices and targets. Bull selection criteria and fertility and genomic selection Physical key performance indicators (KPIs), including they impact on carbon emissions Aetiology and management of the important production diseases in beef including AMR, bio security, vaccination and developments in health such as 'One Health' Beef market requirements and quality assurance schemes
<b>Sheep Husbandry and Management</b> Feeding and nutrition of sheep and using body condition scores as a management tool Lambing management and welfare Key breeding and management strategies for early, mid-season, hill and store lamb production including breeds, hybrids and replacements Physical key performance indicators (KPIs), including they impact on carbon emissions Factors affecting ewe fertility including terminal sire selection Aetiology and management of the important production diseases in sheep including AMR, bio security, vaccination and developments in health such as 'One Health' Sheep market requirements and quality assurance schemes
<b>Dairy Husbandry and Management</b> Feeding and nutrition of dairy animals. Factors affecting voluntary dry matter intake Calf rearing and welfare Factors influencing milk composition and quality. Milk quality tests, milk residues, use of selective dry cow therapy Fertility and breeding of dairy animals. Management practices to improve herd fertility. Breeding indices and targets. Bull selection criteria and fertility, genomic selection and sexed semen. Selection and breeding of replacement heifers. Breeding Key Performance Indicators (KPIs) including they impact on carbon emission Aetiology and management of the important production diseases in dairy including AMR, bio security, vaccination and developments in health such as 'One Health' Dairy market requirements and quality assurance schemes
<b>Animal Production Tasks</b> Evaluating housing and handling facilities, including space, feed space requirements, lighting, fixed and mobile handling, restraints and drafting. Achieving high standards of health and welfare in housing animals Winter feed analysis and budgeting Interpret relevant breeding performance charts/reports utilising national breeding databases Interpreting slaughter data for beef and sheep Interpreting milk test results Drying off techniques of dairy cows

Module Assessment	
Assessment Breakdown	%
Course Work	30.00%
Practical	30.00%
Final Examination	40.00%
Module Special Regulation	

## Assessments

Part Time On Campus			
Course Work			
<b>Assessment Type</b>	Continuous Assessment	<b>% of Total Mark</b>	30
<b>Marks Out Of</b>	100	<b>Pass Mark</b>	0
<b>Timing</b>	S1 Week 9	<b>Learning Outcome</b>	2,3,4
<b>Duration in minutes</b>	0		
<b>Assessment Description</b> Lecturer will decide on a major project such as enterprise technical plan covering areas covered in the learning outcomes of the module.			
No Project			
Practical			
<b>Assessment Type</b>	Practical/Skills Evaluation	<b>% of Total Mark</b>	30
<b>Marks Out Of</b>	0	<b>Pass Mark</b>	0
<b>Timing</b>	n/a	<b>Learning Outcome</b>	5
<b>Duration in minutes</b>	0		
<b>Assessment Description</b> Skills evaluation: Housing and handling facilities, health and welfare in housing animals, winter feed analysis and budgeting, interpreting relevant breeding performance charts/reports, utilising national breeding databases, interpreting slaughter data for beef and sheep, interpreting milk test results, drying off techniques of dairy cows.			
Final Examination			
<b>Assessment Type</b>	Formal Exam	<b>% of Total Mark</b>	40
<b>Marks Out Of</b>	100	<b>Pass Mark</b>	0
<b>Timing</b>	End-of-Semester	<b>Learning Outcome</b>	1,2,3,4
<b>Duration in minutes</b>	0		
<b>Assessment Description</b> End of Semester Examination			
Reassessment Requirement			
<b>A repeat examination</b> 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

This module has no Full Time On Campus workload.

### Workload: Part 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	Learning outcomes 1 to 4	Every Week	2.50	2.5
Practical	Contact	Learning outcome 5 Practical Skills	Every Week	1.00	1
Independent Study	Non Contact	Learning outcomes 1 to 4	Every Week	3.00	3
Directed Reading	Non Contact	Directed reading specific to indicative content and reading list	Every Week	2.50	2.5
Online Contact	Contact	Online support	Every Week	1.00	1
				Total Weekly Learner Workload	10.00
				Total Weekly Contact Hours	4.50

Module Resources
<i>Recommended Book Resources</i>
<p>Teagasc. (2021), Teagasc Dairy Manual, 2021.</p> <p>Teagasc. (2021), Teagasc Beef Manual.</p> <p>John Webster. (2020), Understanding the Dairy Cow, 3. John Wiley &amp; Sons, p.280, [ISBN: 9781119550228].</p>
<i>Supplementary Book Resources</i>
<p>Teagasc CDSU. (2021), Sheep Husbandry.</p> <p>Teagasc CDSU. (2021), Beef Husbandry.</p> <p>Teagasc CDSU. (2021), Dairy Husbandry.</p>
<i>This module does not have any article/paper resources</i>
<i>This module does not have any other resources</i>