APPROVED

AGRI S7011: Advanced Livestock Management

Module Details				
Module Code:	AGRI S7011			
Full Title:	Advanced Livestock Management APPROVED			
Valid From::	Semester 1 - 2021/22 (September 2021)			
Language of Instruction:	English			
Duration:	1 Semester			
Credits::	7.5			
Module Owner::	 Siobhan Jordan John(science) Doherty John Kelly Marie McGlynn Liam McWeeney Breda Brennan Liam McWeeney 			
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

Module Recommendations 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).

No recommendations listed

Module Indicative Content

Beef Husbandry and Management

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

Sheep Husbandry and Management 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

Dairy Husbandry and Management

Dary Husbandry and Management 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

Animal Production Tasks

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						
%						
30.00%						
30.00%						
40.00%						
Module Special Regulation						

Assessments

Part Time On Campus									
Course Work									
Assessment Type	Continuous Assessment	% of Total Mark	30						
Marks Out Of	100	Pass Mark	0						
Timing	S1 Week 9	Learning Outcome	2,3,4						
Duration in minutes	0								
Assessment Description 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									
Assessment Type	Practical/Skills Evaluation	% of Total Mark	30						
Marks Out Of	0	Pass Mark	0						
Timing	n/a	Learning Outcome	5						
Duration in minutes	0								
Assessment Description 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									
Assessment Type	Formal Exam	% of Total Mark	40						
Marks Out Of	100	Pass Mark	0						
Timing	End-of-Semester	Learning Outcome	1,2,3,4						
Duration in minutes	0								
Assessment Description End of Semester 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

This module has no Full Time On Campus workload.

Workload: Part Time On Campus								
Workload Type	Contact Type	Workload Description	Frequency	Average Weekly Learner Workload	Hours			
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			
	10.00							
	4.50							

Recommended Book Resources

Teagasc. (2021), Teagasc Dairy Manual, 2021.

Teagasc. (2021), Teagasc Beef Manual.

John Webster. (2020), Understanding the Dairy Cow, 3. John Wiley & Sons, p.280, [ISBN: 9781119550228].

Supplementary Book Resources

Teagasc CDSU. (2021), Sheep Husbandry.

Teagasc CDSU. (2021), Beef Husbandry. Teagasc CDSU. (2021), Dairy Husbandry.

Teagase CD30. (2021), Daily Husbandi

This module does not have any article/paper resources

This module does not have any other resources