Module Definition Form (MDF)

Module code: MOD011193	**Version:** 1 **Date Amended:** 17/Jun/2025

1. Module Title
Farm Teams

2a. Module Leader
Harriet Wishart

2b. School
Writtle School of Agriculture, Animal and Environmental Sciences

2c. Faculty
Faculty of Science and Engineering

3a. Level
5

3b. Module Type
Standard (fine graded)

4a. Credits
30

4b. Study Hours
300

5. Restrictions

Type	Module Code	Module Name	Condition
Pre-requisites:	None		
Co-requisites:	None		
Exclusions:	None		
Courses to which this module is restricted:	None		

LEARNING, TEACHING AND ASSESSMENT INFORMATION

6a. Module Description

In this module, you will explore many factors that threaten livestock, crop production and food security, such as population growth, ageing farming populations, meat consumption trends, climate-change effects on biotic/abiotic stress and increasing tolerance of pest, diseases and weeds. These issues all have the potential to impact profitability and long-term sustainability of farming businesses.

You will be encouraged to think widely about the nature and scope of these challenges, while also investigating the solutions, which can ease the burden of these challenges and are applicable to individual farm businesses. These will contribute both to the economic and environmental sustainability of operations. You will apply current research and policy to your analysis and explore how real-world farms are adapting to these pressures.

By studying both plant and animal production systems, you will consider issues such as nutrition, health and disease, genetics, breeding, and management decisions. An emphasis will be on biological and sustainable practices which was introduced in Year 1 as well as new technology and precision techniques increasingly available to the industry. You will engage with farms and industry stakeholders to identify real-world challenges, analyse the root causes, and be part of the solution-driven conversation.

6b. Outline Content

Module content may include:

Plant (Arable) Production Topics

- Cultivation techniques: traditional and modern methods to optimize soil health and crop establishment.
- Variety and crop choice: factors influencing decisions for specific crops, including market demands and environmental suitability.
- Fertilizer programs: designing nutrient management plans for optimal crop yield and soil health.
- Pest and disease management: Integrated pest management (IPM) strategies and crop protection practices.
- Sustainability considerations: reducing environmental impact through innovations in crop management, opportunities for Precision Agriculture.

Animal (Livestock) Production Topics

- Breeding and genetics: optimising livestock performance through breeding programs and genetic advancements.
- Health and disease management: preventative and curative approaches to maintaining animal health.
- Animal welfare: balancing production goals with ethical and welfare considerations.
- Grazing management: strategies to optimise pasture use for sustainable livestock production.
- Feeding and nutrition: developing efficient and cost-effective feeding regimes for different livestock systems.
- Product quality: understanding and improving meat, milk, and fibre quality to meet consumer and industry standards.
- Sustainability considerations: reducing greenhouse gas emissions, enhancing resource use efficiency, integrating livestock with arable systems, promoting regenerative practices to improve soil health and biodiversity, opportunities for Precision Livestock Farming.

6c. Key Texts/Literature

The reading list to support this module is available at: https://readinglists.aru.ac.uk/

6d. Specialist Learning Resources
None

7. Learning Outcomes (threshold standards)		
No.	**Type**	**On successful completion of this module the student will be expected to be able to:**
1	Knowledge and Understanding	Identify, understand and describe different issues limiting profitability/performance and their possible interaction
2	Knowledge and Understanding	Propose, innovative solutions to farm businesses and production systems which can work in harmony with the environment, current chemistry, breeding and agronomic solutions
3	Intellectual, practical, affective and transferrable skills	Demonstrate employability skills, including project management, teamwork, communication, and industry-relevant decision-making.

8a. Module Occurrence to which this MDF Refers				
Year	**Occurrence**	**Period**	**Location**	**Mode of Delivery**
2026/7	ZZF	Template For Face To Face Learning Delivery		Face to Face

8b. Learning Activities for the above Module Occurrence			
Learning Activities	**Hours**	**Learning Outcomes**	**Details of Duration, frequency and other comments**
Lectures	72	1-3	3hr lectures x24
Other teacher managed learning	12	1-3	Visits and practicals distributed across both trimesters
Student managed learning	216	1-3	Self-directed learning, set reading, background reading, assignments and engaging with Farm Team business.
TOTAL:	300		

9. Assessment for the above Module Occurrence					
Assessment No.	**Assessment Method**	**Learning Outcomes**	**Weighting (%)**	**Fine Grade or Pass/Fail**	**Qualifying Mark (%)**
010	Coursework	1,2	40 (%)	Fine Grade	30 (%)
2,000 words Report outlining a specific issue in crop or livestock production faced by a case study farm.					
Assessment No.	**Assessment Method**	**Learning Outcomes**	**Weighting (%)**	**Fine Grade or Pass/Fail**	**Qualifying Mark (%)**
011	Practical	3	60 (%)	Fine Grade	30 (%)
10 min presentation, Team work to answer questions					

Assessment components for Element 011				
Component No.	**Assessment Title**	**Submission Method**	**Weighting (%)**	**Components needed for Mark Calculation?**
011/1	Individual 10 minute presentation exploring the solutions to the challenge identified in the previous assignment.		70 (%)	All
011/2	Timed group work to produce a response to questions posed after their presentation.		30 (%)	

In order to pass this module, students are required to achieve an overall mark of 40% (for modules at levels 3, 4, 5 and 6) or 50% (for modules at level 7*).

In addition, students are required to:
(a) achieve the qualifying mark for each element of fine graded assessment as specified above
(b) pass any pass/fail elements

[* the pass mark of 50% applies for all module occurrences from the academic year 2024/25 – see Section 3a of this MDF to check the level of the module and Section 8a of this MDF to check the academic year]