Module Definition Form (MDF)

Module code: MOD011124	**Version:** 1 **Date Amended:** 17/Jun/2025

1. Module Title
Agricultural Systems in Action

2a. Module Leader
Harriet Wishart

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

2c. Faculty
Faculty of Science and Engineering

3a. Level
4

3b. Module Type
Standard (fine graded)

4a. Credits
45

4b. Study Hours
450

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 focus on the core principles of livestock and crop production systems in UK agriculture. You will learn how to describe various production methods and describe their roles in the agricultural landscape. You will delve into core scientific concepts related to animal and plant health, growth, and productivity, providing a solid foundation for understanding the complexities of agricultural systems. Sustainability is a key focus, you will be encouraged to identify and evaluate the resources and practices necessary for responsible and ethical production of livestock and crops.

Through hands-on learning experiences on the farm, you will observe and assess livestock and crop systems. You will analyse relevant data to assess productivity, determining potential yields and associated risks and through practical skills development, you will gain the confidence to apply your knowledge in essential agricultural practices.

6b. Outline Content

Content could include:

Intro to agricultural production systems:

- Overview of UK agriculture
- Historical development of agricultural systems

Livestock production systems:

- Types of livestock systems (e.g. dairy, beef, poultry, sheep)
- Intensive vs extensive production systems
- Animal Welfare (Brambell Report, Animal Machines, Five Freedoms)

Crop production systems:

- Overview of major crop types (e.g. cereals, fruits, vegetables)
- Conventional vs sustainable cropping methods
- Factors affecting crop growth and health (e.g. soil, water, climate)

Grasslands

Core Scientific Concepts

- Animal science: growth, health, nutrition, and behaviour
- Plant science: growth, health, and nutrient management

Practical Skills Development

- Hands-on experience in livestock management
- Practical crop management skills (e.g. planting, monitoring, harvesting)
- Data collection and analysis in agricultural settings

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	Describe the fundamental principles and roles of a range of livestock and crop production systems within the context of UK agriculture
2	Knowledge and Understanding	Explain the core animal and plant scientific concepts underpinning agricultural production systems, highlighting factors such as growth, health, and productivity.
3	Knowledge and Understanding	Identify and evaluate the resources and practices needed to sustainably produce livestock and crop products
4	Intellectual, practical, affective and transferrable skills	Observe and evaluate livestock and crop production systems in on-farm settings, assessing health, quality, and overall system efficiency.
5	Intellectual, practical, affective and transferrable skills	Assess crop and livestock productivity by analysing relevant data to determine potential yield, quality, and risks within different production systems.
6	Intellectual, practical, affective and transferrable skills	Demonstrate a range of practical skills required within agricultural production systems.

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	110	1-6	The equivalent of 4.5 - 5 hours per week (1 timetabled day per week) with flexible blocks of delivery to accommodate seasons and link theory to student-led practical project work
Other teacher managed learning	66	1-6	Additional group project work, visits and speakers
Student managed learning	274	1-6	Includes self-reflection and skills training
TOTAL:	450		

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	30 (%)	Fine Grade	30 (%)
8 in-class multiple choice quizzes (via canvas) checking understanding of key principles of science and production systems					

Assessment components for Element 010			
Component No.	**Assessment Title**	**Submission Method**	**Components needed for Mark Calculation?**
010/1	In-class multiple choice quiz 1		Best 5 out of 8. All components used in calculation are equally weighted
010/2	In-class multiple choice quiz 2		
010/3	In-class multiple choice quiz 3		
010/4	In-class multiple choice quiz 4		
010/5	In-class multiple choice quiz 5		
010/6	In-class multiple choice quiz 6		
010/7	In-class multiple choice quiz 7		
010/8	In-class multiple choice quiz 8		

Assessment No.	Assessment Method	Learning Outcomes	Weighting (%)	Fine Grade or Pass/Fail	Qualifying Mark (%)
011	Coursework	1-6	40 (%)	Fine Grade	30 (%)
Report (2,000 words) project of production - crop or livestock. Submitted on Canvas					

Assessment No.	Assessment Method	Learning Outcomes	Weighting (%)	Fine Grade or Pass/Fail	Qualifying Mark (%)
012	Coursework	1-6	30 (%)	Fine Grade	30 (%)
Reflective log of agricultural experiences, visits, practicals and speakers - at least 6 entries, best of 4.					

Assessment components for Element 012			
Component No.	**Assessment Title**	**Submission Method**	**Components needed for Mark Calculation?**
012/1	Reflective log entry 1		Best 4 out of 6. All components used in calculation are equally weighted
012/2	Reflective log entry 2		
012/3	Reflective log entry 3		
012/4	Reflective log entry 4		
012/5	Reflective log entry 5		
012/6	Reflective log entry 6		

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]