

Module code: MOD011003	Version: 1 Date Amended: 08/Oct/2025
-------------------------------	--

1. Module Title
Performance Analysis and Advancement

2a. Module Leader
Jane Hart

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

2c. Faculty
Faculty of Science and Engineering

3a. Level
6

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:	BSc Equine Therapy, Rehabilitation and Performance; BSc Equine Science; BSc Equine Business Management		

LEARNING, TEACHING AND ASSESSMENT INFORMATION

6a. Module Description

The horse and rider dyad are ever evolving through the stages of training and require consistent evaluation of the multiple and often complex elements involved in producing a competitive partnership. In this module, you'll explore how training protocols based on discipline specific Needs Analysis outcomes, and awareness of physiological responses to exercise, are crucial for enhancing both horse and rider fitness. Technology has evolved significantly, allowing us to identify the more detailed and targeted responses to training outcomes and could potentially become more common to use these tools in supporting all disciplines associated within the industry.

In this module, you'll learn how equestrian athletes should be considered in the same structured way as that of any other athlete competing in other sports and should be undertaking data driven techniques to improve training outcomes. There is an overwhelming opinion suggesting there is a need for a scientific approach to the equestrian athlete's preparation for competition which includes both evaluation and prescriptive exercise protocols. This involves the understanding of adaptations to training, nutrition, physiological and psychological responses and the use of performance analysis through available technology. This module explores the physiological parameters that may give the equestrian athlete 'the edge' and increase their chance of competitive success.

6b. Outline Content

- Progressive training of both horse and rider in multidiscipline scenarios will utilise appropriate testing techniques and technology to evaluate outcomes in all aspects.
- Observations of physiological, biomechanical, psychological and behavioural responses will be considered, and utilised, to create plans to enhance performance of the horse rider dyad.
- Exercise protocols utilising a multidimensional approach will be put in place in order to increase skills and fitness.
- Goal planning based on individual needs will be designed to support training outcomes.
- Unification of technology, research and industry practice to link all progressive training elements associated with equine development and performance.

6c. Key Texts/Literature

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

6d. Specialist Learning Resources

Equestrian Facilities

Technology --- Equigate AMG/EMG Equinosis Alogo Quintic

Live case studies with horse/rider dyads

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	Critically evaluate the impact of common musculoskeletal on equine biomechanics and performance, integrating anatomical and physiological principles into training protocols. Critically evaluate the application of progressive training for horses and riders at a competitive level and formulate appropriate exercise protocols and programmes
2	Knowledge and Understanding	Demonstrate a critical understanding of performance analysis tools, biomechanical principles and training methodologies in assessing movement, monitoring musculoskeletal health, and optimising equine performance.
3	Knowledge and Understanding	Evaluate horse and rider combinations across different equestrian disciplines, identifying short- and long-term strategies for improving biomechanics, welfare, and performance outcomes.
4	Intellectual, practical, affective and transferrable skills	Apply anatomical and biomechanical knowledge to design and justify progressive training and exercise programmes that enhance performance while mitigating injury risk.
5	Intellectual, practical, affective and transferrable skills	Create and demonstrate long term evaluation and training solutions in scenarios relating closely to industry practices and disciplines.

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	30	1-5	Formal teaching hours
Other teacher managed learning	42	1-5	Practicals, case studies to support technology supported arena based evaluations
Student managed learning	228	1-5	Self-directed study to include further research, pre session preparation and post session reflection and application
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	50 (%)	Fine Grade	30 (%)
3000 word critical review					
Assessment No.	Assessment Method	Learning Outcomes	Weighting (%)	Fine Grade or Pass/Fail	Qualifying Mark (%)
011	Coursework	3,4,5	50 (%)	Fine Grade	30 (%)
20 minute narrated video					

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]