

CORPORATE AND ACADEMIC SERVICES

MODULE SPECIFICATION

Part 1: Basic Data						
Module Title	Dairy Herd Management					
Module Code	UILXSV-15-2		Level	2	Version	1
Owning Faculty	Hartpury Field Animal and Land Science				ence	
Contributes towards	FdSc Agriculture					
UWE Credit Rating	15	ECTS Credit Rating	7.5	Module Type	Standard	
Pre-requisites	None		Co-requisites	None		
Excluded Combinations	None		Module Entry requirements	None		
Valid From	01 September 2014		Valid to	01 September 2020		

CAP Approval Date	27 January 2014
-------------------	-----------------

	Part 2: Learning and Teaching			
Learning Outcomes	On successful completion of this module students will be able to:			
	Analyse the dairy industry at a global and national level (A). Explain the lactation curve and its importance on the breeding cycle of the cow and the implications on the annual milk production for a dairy business (A, B).			
	Formulate and justify a dairy ration to meet the requirements of a dairy cow at a particular stage of lactation and to alter milk quality (B).			
	Evaluate dairy sires and replacement policies (A). Discuss how herd health issues impact on the welfare and the productivity of the animal (A, B).			
	Describe the selection of milking parlor, its maintenance and milking procedure to meet the necessary hygienic food standards (B).			
Syllabus Outline	Size of the dairy industry relative to the food industry. Current structure and markets of the UK dairy industry in comparison to the EU and globally.			
	Lactation curves in relation to cow yield, calving season including butterfat and protein curves. Dry matter intake responses and change in BCS curves explained using the lactation curve and physiological aspects.			
	Dairy feeding systems tied in with dairy nutrition. Ration formulation accounting for available forages, straights, stage of lactation and nutrient requirements. Nutritional altering of milk fat and protein in order to either meet the milk contract requirements or gain maximum milk price.			
	Dairy sires studied to contextualised breeding traits and productivity gains. Longevity of cows in relation to breeding identified using latest breeding indexes and the factors attributing towards it (SCC, fertility, calving ease, udder and leg confirmation).			

5 Recognition of how lameness, fertility, mastitis and metabolic diseases impacts on a dairy businesses performance. Herd health plans, vaccination programmes, nutritional influences, parlour design/maintenance, milking procedure and other pro-active management procedures investigated in the mitigation of poor herd health. 6 Dairy herd systems including grazing, continuously housed, TMR and concentrates in-parlour and outside parlour feeders contrasted and the resulting breeding, production and milk quality goals identified. Dairy costings fully explained and used to inform dairy unit management decisions. Contact Hours Indicative delivery modes: Lectures, guided learning, seminars 33 Self-directed study 3 Independent study 114 **TOTAL HOURS** 150 Teaching and A variety of learning strategies will be used including lectures, seminars, on-farm and Learning Methods computer workshops and self-directed learning. Students will also be expected to engage in independent learning throughout the module and time to complete assessment work. Scheduled learning May include lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops; fieldwork; external visits; work based learning; supervised time in studio/workshop. Independent learning May include hours engaged with essential reading, case study and/or seminar preparation, assignment preparation and completion etc. Virtual learning environment (VLE) (or equivalent) This module is supported by a VLE where students will be able to find all necessary module information. Direct links to information sources will also be provided from within the VLE (or equivalent). **Key Information** Key Information Sets (KIS) are produced at programme level for all programmes that this Sets Information module contributes to, which is a requirement set by HESA/HEFCE. KIS are comparable sets of standardised information about undergraduate courses allowing prospective students to compare and contrast between programmes they are interested in applying for. Key information set - module data Number of credits for this module 15 Hours to be Scheduled Independent **Placement** Allocated Hours allocated learning and study hours study hours teaching study hours 150 36 114 0 150 The table below indicates as a percentage the total assessment of the module which constitutes: Written Exam: Unseen written exam, open book written exam, in-class test. 2 Coursework: Written assignment or essay, report, dissertation, portfolio, project. 3 Practical Exam: Oral Assessment and/or presentation, practical skills assessment, practical exam.

Please note that this is the total of various types of assessment and will not necessarily reflect the component and module weightings in the Assessment section of this module description:

Total assessment of the module:

Written exam assessment percentage Coursework assessment percentage Practical exam assessment percentage

50%
50%
0%
100%

Reading Strategy

Core readings

Any essential reading will be indicated clearly, along with the method for accessing it, e.g. students may be required to purchase a set text, be given a print study pack or be referred to texts that are available electronically or in the Library. Module guides will also reflect the range of reading to be carried out.

Further readings

Further reading will be required to supplement the set text and other printed readings. Students are expected to identify all other reading relevant to their chosen topic for themselves. They will be required to read widely using the library search, a variety of bibliographic and full text databases, and Internet resources. Many resources can be accessed remotely. The purpose of this further reading is to ensure students are familiar with current research, classic works and material specific to their interests from the academic literature.

Access and skills

Formal opportunities for students to develop their library and information skills are provided within the induction period and study skills sessions. Additional support is available through online resources. This includes interactive tutorials on finding books and journals, evaluation information and referencing. Sign up workshops are also offered.

Indicative Reading List

The following list is offered to provide validation panels/accrediting bodies with an indication of the type and level of information students may be expected to consult. As such, its currency may wane during the life span of the module specification. However, as indicated above, CURRENT advice on readings will be available via other more frequently updated mechanisms, including the module guide.

- Blowey, R.W. (Current Edition) A veterinary book for dairy farmers. Ipswich: Farming Press.
- Blowey, R.W. (Current Edition) Cattle Lameness and Hoofcare. Ipswich: Old Pond Publishing.
- Blowey, R and Edmondson, P. (Current Edition) Mastitis Control in Dairy Herds.
 Wallingford: CABI.
- Charlton, S.J. (Current Edition) Calf Rearing Guide. Ashby-De-La-Zouch: Context Products.
- Cherney (Current Edition) Grass for dairy cattle. Wallingford: CABI.
- Fraser, A. F. and Broom, D. M. (Current Edition) Farm animal behaviour and welfare. Wallingford: CABI.
- Green, M. (Current Edition) Dairy Herd Health. Wallingford: CABI
- Hill, J. and Andrews A. H. (Current Edition) The expectant dairy cow. Lincoln: Chalcombe.
- Hulsan, J. (Current Edition) Cow signals: A practical guide for dairy farm management. Netherlands: Roodbont Uitgeverij.
- Kebreab, E., Mills, J.A.N. and Beever D.E. (Current Edition) *Dairying: using science to meet consumers' needs*. Nottingham: Nottingham University Press.
- McDonald, P. (Current Edition) Animal nutrition. Harlow: Longman Scientific & Technical.
- Russell, E.M. (Current Edition) *Dairy Cows: Nutrition, Fertility & Milk Production* (*Animal Science, Issues and Professions Agriculture Issues and Policies*). New York: Nova Science Publishers.

- Tyler, H. and Ensminger, M. (Current Edition) Dairy Cattle Science. New Jersey: Pearson.
- Webster, J. (Current Edition) Understanding the dairy cow. Oxford: Blackwell Scientific.

Journals:

Assessment

Journal of Dairy Science.

Websites and databases:

- DairyCo website: www.dairyco.org.uk
- Hoard's Dairyman The U.S. Dairy Farm Magazine: www.hoards.com
- Kingshay Farming Notes: Hartpury LRC
- Northern Ireland Farmer Funded Research: www.agrisearch.org

Part 3: Assessment

The above sources give an indication of the area of study involved. Although students may be directed to some specific titles, they will also be encouraged to identify other relevant material for themselves.

The written examination has been chosen so to facilitate broad assessment of the

knowledge and understanding; and the intellectual skills gained throughout the module in Strategy a time-limited and controlled setting. The written report assignment is chosen to facilitate in depth utilisation of skills and understanding gained from farm visits and seminars; and relating this to material learnt in lectures and in additional study via analysis, evaluation and discussion. Feedback will be provided throughout the module via tutorial support; class and on farm discussions and short exercises in addition to that on assignment submissions and examination scripts. In line with the College's commitment to facilitating equal opportunities, a student may apply for alternative means of assessment if appropriate. Each application will be considered on an individual basis taking into account leaning and assessment needs. For further information regarding this please refer to the VLE. Identify final assessment component and element Written examination. % weighting between components A and B (Standard modules only) A: B: 50% 50% First Sit Component A (controlled conditions) Element weighting Description of each element Written examination (1 hour) 100% Component B **Element weighting** Description of each element Written report (1,250 words) 100% Resit (further attendance at taught classes is not required) Component A (controlled conditions) **Element weighting** Description of each element Written examination (1 hour) 100% Component B **Element weighting Description of each element** Written assignment (1,250 words) 100% If a student is permitted an EXCEPTIONAL RETAKE of the module the assessment will be that indicated by the Module Description at the time that retake commences.