HARTPURY
UNIVERSITY CENTRE

Module Specification

Part 1: Basic Data						
Module Title	Livestock Science and Husbandry					
Module Code	UILV76-30-1		Level	1	Version	1
Credit Rating	30	ECTS Credit Rating	15	WBL module?	No	
Owning Faculty	Hartpury		Field	Animal and Land		
Department	Agriculture		Module Type	Standard		
Contributes towards	BSc (Hons) Applied Agriculture BSc (Hons) Applied Agriculture (SW) BSc (Hons) Applied Agriculture (Livestock Production) BSc (Hons) Applied Agriculture (Livestock Production) (SW) BSc (Hons) Applied Agriculture (Crop Production) BSc (Hons) Applied Agriculture (Crop Production) (SW) BSc (Hons) Applied Agriculture (International) BSc (Hons) Applied Agriculture (International) (SW)					
Pre-requisites	None		Co- requisites	None		
Excluded Combinations	None		Module Entry requirements	None		
Last Major Approval Date	19 January 2017		Valid from	1 September 2017		
Amendment Approval Date			Revised with effect from			
Review Due By	1 September 2023					

Part 2: Learning and Teaching	
Learning Outcomes	On successful completion of this module students will be able to: 1. Demonstrate a scientific understanding of animal anatomy and physiology, and relate it to a range of livestock species. (A) 2. Perform a range of practical tasks relating to livestock management and husbandry to acceptable industry standards. (A, B) 3. Apply knowledge of the scientific principles that underpin the growth, development and management of production animals. (A) 4. Discuss the role of animal welfare and legislation in livestock production. (A) 5. Identify and discuss key diseases and disorders that affect livestock. (A) 6. Evaluate the range of methods available for diagnosis and treatment of disease. (A) 7. Describe reproductive strategies and outline common breeding programmes used in livestock production. (A) 8. Assess the interaction between an animal's behaviour and its environment. (A, B)
Syllabus Outline	The module will cover both ruminant and non-ruminant livestock. • Anatomy and physiology of the main body systems of a range of livestock: relation of scientific principles to the practice of animal husbandry; identification of areas prone to stress, disease or injury. • Common diseases and disorders of livestock and their vectors: identification of the healthy animal; recognition of common diseases; assessment of the need

	for veterinary assistance; description and evaluation of common prophylaxis; notifiable diseases; parasites, zoonosis; veterinary terminology; causal agents; environmental factors; principles of vaccination and immunity; factors influencing animal health; importance of good biosecurity. • Reproductive strategies, anatomy, and the basis for livestock breeding programmes: reproductive anatomy and behaviour; appraisal of breeding problems; inbreeding, line breeding, crossbreeding and hybrid vigour. • Animal welfare and legislation in livestock production. • The interaction between an animal's behaviour and its environment: observation and evaluation of normal, abnormal, aggressive and sexual behaviour. • Relevant practical competencies related to livestock management.
Teaching and Learning Methods (and contact hours)	The module will be delivered to allow students to follow the production cycle of farm livestock. Students are encouraged to develop core vocational skills through relevant short courses, and visits to subject specific farms, producers and food processing industries. These will occur throughout the module to support student learning. The module includes directed study time where students will be set reading tasks for seminar work. Students will also complete a short period of approved work placement on the livestock enterprises on the farm as part of the module. Students will apply their fundamental knowledge and understanding of livestock production and vocational skills to assist them to begin problem solving, suggest improvements to current practice, and support future study and further employment opportunities within industry. Students will be encouraged to develop their knowledge and understanding and academic skills through contact time in lectures, independent and directed study, industry visits, research and evidence based learning. **Independent learning** includes hours engaged with essential reading, case study preparation, assignment preparation and completion etc. These sessions constitute an average time per level as indicated in the table below. Scheduled sessions may vary slightly depending on the module choices you make. **Virtual Learning Environment (VLE)** This specification is supported by Moodle where students will be able to find all necessary module information. Direct links to information sources will also be provided from within the VLE.
Key Information Sets Information	HEFCE require Key Information Sets (KIS) to be produced at programme level for all undergraduate programmes of more than one year in length. 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* 30 Hours to be allocated / Scheduled learning and teaching study hours / Independent study hours / Placement study hours / Allocated Hours 300 / 48 / 192 / 60 / 300 The table below indicates as a percentage the total assessment of the module which constitutes a - **Written Exam**: Unseen written exam, open book written exam, In-class test

	Coursework: Written assignment or essay, report, dissertation, portfolio, project **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: 0% Coursework assessment percentage: 100% Practical exam assessment percentage: 0% 100%
Reading Strategy	Students are expected to read a range of text books, study skills material, journal articles and industry relevant publications in support of the module. Any **core** essential reading will be indicated clearly in the first week of module teaching along with the method for accessing it, e.g. students may be expected to purchase a set text, be given a study pack, or be referred to texts that are available electronically, etc. This guidance will be available on the relevant VLE page. **Further** and wider reading is encouraged for this module with relevant material indicated in lectures, lecture notes, seminar preparation instructions and on the relevant VLE. ***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 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. Books: Damron, W. S. (Current Edition) *Introduction to Animal Science*. New Jersey: Pearson Prentice-Hall Frandson, R.D., Wilke, W.L. & Fails, A.D. (Current Edition) *Anatomy and physiology of farm animals*. London: Lippincott Williams & Wilkins. Fraser, A. F. and Broom, D. M. (Current Edition) *Farm animal behaviour and welfare.* Wallingford: Cab International Gillespie, J. (Current Edition) Modern *Livestock & Poultry Production*. New York: Thompson Delmar Learning. Holden, P., Ensminger, M. (Current Edition) *Swine production*. New Jersey: Pearson, Prentice Hall. McDonald, P. (Current Edition) *Animal nutrition*. London: Longman Scientific & Technical. Pond, W. and Pond, K. (Current Edition) *Introduction to Animal Science*. New York: John Wiley & Sons. Reece, W.O. (Current Edition) *Physiology of domestic animals*. Baltimore: Williams & Wilkins.

Scanes, C., Brant, G. Ensminger, M. (Current Edition) *Poultry Science*. New Jersey: Pearson, Prentice Hall.

Taylor, R.E. (Current Edition) *Scientific farm animal production: an introduction to animal science.* New Jersey: Pearson Prentice Hall.

Websites & Databases

Agriculture and Horticulture Development Board http://www.ahdb.org.uk/

National Animal Disease Information Service http://www.nadis.org.uk/

Animal & Plant Health Agency
https://www.gov.uk/government/organisations/animal-and-plant-health-agency

Journals

Animal

Livestock Science

Animal Welfare

Journal of Dairy Science

Part 3: Assessment	
Assessment Strategy	The module is assessed through a portfolio which will include controlled and uncontrolled elements; the controlled element will be a written in class test to prepare students for future examinations. The portfolio will provide a summary of student progress. This may be centred on practical achievement of vocationally relevant skills, short answer questions, short project or reflective logs. Students are also required to complete a minimum of 60 hours' farm duties on a Hartpury approved work placement. Throughout the module and skills assessment there will be opportunities for students to receive formative feedback to support them in their development and allow them to reflect effectively on their performance and whether it meets industry requirements. Additional opportunities for reflection will occur within groups during visits and project completion. Portfolios will be constructed throughout the course of the module and must be completed by the submission date. In line with the Institution'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 learning and assessment needs. For further information regarding this please refer to the VLE.

Identify final assessment component and element	**Portfolio**	
% weighting between components A and B (Standard modules only)	**A:** **100%**	**B**: **P/F**

First Sit	
Component A (controlled conditions) **Description of each element**	**Element weighting** **(as % of component)**
1. Portfolio (equivalent to 3,000 words)	100%
Component B **Description of each element**	**Element weighting** **(as % of component)**
1. Evidence of completion of 60 hours farm duties	P/F

Resit (further attendance at taught classes is not required)	
Component A (controlled conditions) **Description of each element**	**Element weighting** **(as % of component)**
1. Portfolio (equivalent to 3,000 words)	100%
Component B **Description of each element**	**Element weighting** **(as % of component)**
1. Evidence of completion of 60 hours farm duties	P/F
If a student is permitted a retake of the module under the Academic Regulations and Procedures, the assessment will be that indicated by the Module Specification at the time that retake commences.	