

MODULE SPECIFICATION

Part 1: Basic Data					
Module Title	Applied Animal Nutrition				
Module Code	UINXSP-15-2	Level	2	Version	1.1
Owning Faculty	Hartpury	Field	Animal and Land Science		
Contributes towards	BSc (Hons) Animal Science BSc (Hons) Animal Science (SW) BSc (Hons) Applied Animal Science BSc (Hons) Applied Animal Science (SW) BSc (Hons) Applied Animal Science with Therapy BSc (Hons) Applied Animal Science with Therapy (SW) FdSc Animal Science and Management FdSc Veterinary Nursing Science (SW) FdSc Equine Veterinary Nursing Science (SW)				
UWE Credit Rating	15	ECTS Credit Rating	7.5	Module Type	Standard
Pre-requisites	Animal Nutrition (UINXK5-15-1); or Animal Husbandry for Veterinary Nurses (UINXNT-15-1); or Companion Animal Management (UINXGQ-20-1)	Co-requisites	None		
Excluded Combinations	None	Module Entry requirements	None		
Valid From	01 September 2016	Valid to	01 September 2020		

CAC Approval Date	27 January 2014 V1.1- 02 February 2016
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Part 2: Learning and Teaching	
Learning Outcomes	<p>On successful completion of this module students will be able to:</p> <ol style="list-style-type: none"> 1 Analyse the feeding values of a variety of foodstuffs available for animals (B). 2 Relate feeding behaviour to animal husbandry and productivity, taking into consideration physiological and welfare factors (A). 3 Justify the nutrient and energy requirements of animals based on scientific concepts and principles at different stages of their lives (A, B). 4 Design and evaluate diets using the principles of scientific rationing whilst understanding their limitations (B). 5 Assess the implications of the legislation surrounding the animal feed industry and review the benefits for animal and human health (A). 6 Design and format a ration formulation spreadsheet to match the supply nutrients and energy with the animal's requirements (B).

Syllabus Outline	<ol style="list-style-type: none"> 1 Classification and availability of foodstuffs and their suitability for different animals, commercial manufacture of animal feeds and legislation. 2 Nutrient requirements of animals at different stages in their lives: maintenance, working, reproduction, production and old age. 3 Scientific rationing, formulation and its limitations: systems of rationing; use of formulae, excel spreadsheets; animal requirements and feed data handling; comparisons with rations actually fed to different species of animals. 4 Effects of deficiencies and excesses of feed constituents: protein, vitamins, minerals. 5 Application of scientific principles and concepts surrounding different energies, vitamins and minerals and anti-nutritive factors to animal diets. 6 Implications of animal behaviour and management on animal nutrition and gastro-intestinal disorders 												
Contact Hours	<p>Indicative delivery modes:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">Lectures, guided learning, seminars</td> <td style="text-align: right;">33</td> </tr> <tr> <td>Self-directed study</td> <td style="text-align: right;">3</td> </tr> <tr> <td>Independent study</td> <td style="text-align: right;">114</td> </tr> <tr> <td>TOTAL HOURS</td> <td style="text-align: right;">150</td> </tr> </table>	Lectures, guided learning, seminars	33	Self-directed study	3	Independent study	114	TOTAL HOURS	150				
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Teaching and Learning Methods	<p>Scheduled learning May include lectures, seminars, tutorials, project supervision, demonstration, practical classes, external visits.</p> <p>Independent learning May include hours engaged with essential reading, case study and/or seminar preparation, assignment preparation and completion etc.</p> <p>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).</p>												
Key Information Sets Information	<p>Key Information Sets (KIS) are produced at programme level for all programmes that this 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.</p> <p>Key information set – module data</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">Number of credits for this module</td> <td style="text-align: center; border: 1px solid black;">15</td> </tr> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 15%;">Hours to be allocated</th> <th style="width: 25%;">Scheduled learning and teaching study hours</th> <th style="width: 25%;">Independent study hours</th> <th style="width: 20%;">Placement study hours</th> <th style="width: 15%;">Allocated Hours</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">150</td> <td style="text-align: center;">36</td> <td style="text-align: center;">114</td> <td style="text-align: center;">0</td> <td style="text-align: center;">150</td> </tr> </tbody> </table> <p>The table below indicates as a percentage the total assessment of the module which constitutes:</p> <ol style="list-style-type: none"> 1 <i>Written Exam:</i> Unseen written exam, open book written exam, in-class test. 2 <i>Coursework:</i> Written assignment or essay, report, dissertation, portfolio, project. 3 <i>Practical Exam:</i> Oral Assessment and/or presentation, practical skills assessment, practical exam. <p>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:</p>	Number of credits for this module	15	Hours to be allocated	Scheduled learning and teaching study hours	Independent study hours	Placement study hours	Allocated Hours	150	36	114	0	150
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	<p>Total assessment of the module:</p> <table border="1" data-bbox="938 224 1067 365"> <tr> <td>Written exam assessment percentage</td> <td>50%</td> </tr> <tr> <td>Coursework assessment percentage</td> <td>0%</td> </tr> <tr> <td>Practical exam assessment percentage</td> <td>50%</td> </tr> <tr> <td></td> <td>100%</td> </tr> </table>	Written exam assessment percentage	50%	Coursework assessment percentage	0%	Practical exam assessment percentage	50%		100%
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	100%								
Reading Strategy	<p>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.</p> <p>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.</p> <p>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.</p>								
Indicative Reading List	<p>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.</p> <ul style="list-style-type: none"> • Blas, C. and Wiseman J. (Current Edition) <i>The Nutrition of the Rabbit</i>. New York: CAB International. • Burger, I.H. (Ed) (Current Edition) <i>The Waltham Book of Companion Animal Nutrition</i>. Oxford: Pergamon. • Cooper, M.R. and Johnson, A.W. (Current Edition) <i>Poisonous Plants in Britain and their Effects on Animals and Man</i>. London: HMSO. • Ewing, W.N. and Tucker L.A. (Electronic Resource) <i>The Living Gut</i>. Nottingham: Nottingham University Press. • Frate, D. (Current Edition) <i>Equine Nutrition and Feeding</i>. Oxford: Blackwell Science Ltd. • Hill, J. (Current Edition) <i>Nutritional Physiology of the Horse</i>. Nottingham: Nottingham University Press. • Lonsdale, C. (Current Edition) <i>Straights. Raw Materials for Animal Feed Compounders and Farmers</i>. Marlow: Chalcombe Publications. • McDonald, P., Edwards, R.A., Greenhalgh, J.F.D., and Morgan, C.A. (Current Edition) <i>Animal Nutrition</i>. Harlow: Longman Scientific & Technical. • National Research Council (Current Edition) <i>Nutrient Requirements of Dairy Cattle</i>. Washington, D.C: National Academy Press. • National Research Council (Current Edition) <i>Nutrient Requirements of Horses</i>. Washington, D.C: National Academy Press. • National Research Council (Current Edition) <i>Nutrient Requirements of Laboratory Animals</i>. Washington, D.C: National Academy Press. • National Research Council. (Current Edition) <i>Nutrient Requirements of Dogs and Cats</i>. Washington, D.C: National Academy Press. • Patton, R. (Electronic Resource) <i>Ruined by Excess, Perfected by Lack: The Paradox of Pet Nutrition</i>. Nottingham: Nottingham University Press. 								

	<ul style="list-style-type: none"> • Thomas, C. (Current Edition) <i>Feed into Milk</i>. Nottingham: Nottingham University Press. • Wills, J.M. and Simpson, K.W., eds. (Current Edition) <i>The Waltham Book of Clinical Nutrition of the Dog and Cat</i>. Oxford: Pergammon. <p>Journals</p> <ul style="list-style-type: none"> • Animal Nutrition. • Journal of Animal Physiology and Animal Nutrition. <p>Websites and Databases</p> <ul style="list-style-type: none"> • BioOne. • Science Direct. <p><i>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.</i></p>
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Part 3: Assessment			
Assessment Strategy	<p>The written examination has been chosen to facilitate broad assessment of the knowledge and understanding and intellectual skills gained throughout the module in a time-limited and controlled setting.</p> <p>The practical report is chosen to facilitate in depth utilisation of laboratory skills gained in practicals and relating findings/observations to material learnt in lectures and gained in additional study via analysis, evaluation and discussion.</p> <p>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 learning and assessment needs. For further information regarding this please refer to the VLE.</p>		
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			
1	Written examination (1 hour)	100%	
Component B		Element weighting	
Description of each element			
1	Practical report (1,250 words)	100%	
Resit (further attendance at taught classes is not required)			
Component A (controlled conditions)		Element weighting	
Description of each element			
1	Written examination (1 hour)	100%	
Component B		Element weighting	
Description of each element			
1	Practical report (1,250 words)	100%	
<p>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.</p>			