

**CORPORATE AND ACADEMIC SERVICES**

**MODULE SPECIFICATION**

Part 1: Basic Data					
Module Title	Animal and Equine Nutrition				
Module Code	UINXQ9-15-1	Level	1	Version	1
Owning Faculty	Hartpury	Field	Animal and Land Sciences		
Contributes towards	FdSc Animal Management FdSc Equine Management				
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 2013		Valid to	01 September 2019	

<b>CAP Approval Date</b>	06 August 2013
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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"> <li>1 Compare the anatomy and physiology of the gastrointestinal tracts of named mammals (A, B).</li> <li>2 Identify the physiological mechanisms involved in digestion and relate this to the management of a range of mammals (A, B).</li> <li>3 Explain the basic biochemistry of the six constituents of foods, and evaluate their importance in animal nutrition (A).</li> <li>4 Demonstrate an ability to formulate rations for a range of mammalian species (A, B).</li> <li>5 Describe the theory of proximate analysis and the techniques needed to apply it (A).</li> <li>6 Demonstrate an awareness of the importance of nutritional analysis of foodstuffs and the practical skills involved (A, B).</li> </ol>
Syllabus Outline	<ol style="list-style-type: none"> <li>1 Study of the anatomy and physiology of the gastrointestinal tract of a range of mammals (to include herbivores, omnivores and carnivores).</li> <li>2 Digestion, absorption, synthesis and fate of carbohydrates, proteins, fats/lipids, water, minerals and vitamins necessary in the nutrition of mammals.</li> <li>3 The techniques used for proximate analysis of foods.</li> <li>4 Importance of digestive trials and their relationship with the energy requirement for specific mammalian species.</li> <li>5 Ration formulations for a range of mammals.</li> <li>6 Types of grasses and forages available as foodstuffs; forage conservation and their impact on the nutritional status of mammals; importance of grassland management in herbivorous mammal diets.</li> </ol>

Contact Hours	<p>Indicative delivery modes:</p> <table border="0"> <tr> <td>Lectures, guided learning, seminars etc</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 learning</td> <td style="text-align: right;">114</td> </tr> <tr> <td><b>TOTAL</b></td> <td style="text-align: right;"><b>150</b></td> </tr> </table>	Lectures, guided learning, seminars etc	33	Self directed study	3	Independent learning	114	<b>TOTAL</b>	<b>150</b>										
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Teaching and Learning Methods	<p>A variety of learning strategies will be used including lectures, practicals and seminars (33 hours) and self-directed learning (3 hours). Students will also be expected to engage in independent learning throughout the module (114 hours) including time to complete assessment work.</p> <p><b>Scheduled learning</b> Includes lectures, laboratory practicals, tutorials; work based learning and supervised time in the laboratory</p> <p><b>Independent learning</b> 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.</p> <p><b>Virtual learning environment (VLE)</b> This specification is supported 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.</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><b>Key Information Set - Module data</b></p> <p><i>Number of credits for this module</i> <span style="float: right; border: 1px solid black; padding: 2px;">15</span></p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <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: 20%;">Independent study hours</th> <th style="width: 20%;">Placement study hours</th> <th style="width: 20%;">Allocated Hours</th> </tr> </thead> <tbody> <tr> <td>150</td> <td>36</td> <td>114</td> <td>0</td> <td>150</td> </tr> </tbody> </table> <p>The table below indicates as a percentage the total assessment of the module which constitutes a:</p> <ol style="list-style-type: none"> <li>1 <i>Written Exam</i>: Unseen written exam, open book written exam, in-class test.</li> <li>2 <i>Coursework</i>: Written assignment or essay, report, dissertation, portfolio, project.</li> <li>3 <i>Practical Exam</i>: Oral Assessment and/or presentation, practical skills assessment, practical exam.</li> </ol> <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> <p>Total assessment of the module:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 60%;">Written exam assessment percentage</td> <td style="text-align: center; border: 1px solid black; padding: 2px;">50%</td> </tr> <tr> <td>Coursework assessment percentage</td> <td style="text-align: center; border: 1px solid black; padding: 2px;">50%</td> </tr> <tr> <td>Practical exam assessment percentage</td> <td style="text-align: center; border: 1px solid black; padding: 2px;">0%</td> </tr> <tr> <td></td> <td style="text-align: center;">100%</td> </tr> </table>	Hours to be allocated	Scheduled learning and teaching study hours	Independent study hours	Placement study hours	Allocated Hours	150	36	114	0	150	Written exam assessment percentage	50%	Coursework assessment percentage	50%	Practical exam assessment percentage	0%		100%
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Reading Strategy	<p><b>Access and skills</b>  Formal opportunities for students to develop their library and information skills are provided within the induction period and student 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> <p><b>Essential Reading</b>  Any essential reading will be indicated clearly, 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, or in the Library. Module guides will also reflect the range of reading to be carried out.</p> <p><b>Further Reading</b>  Further reading is advisable for this module, and students will be encouraged to explore at least one of the titles held in the library on this topic. A current list of such titles will be given in the module handbook and revised annually.</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"> <li>• Bacha, W.J. &amp; Bacha, L.M. (Current Edition) <i>A colour atlas of veterinary histology</i>. Lippencott: Philadelphia PA.</li> <li>• Frandson, R.D. (Current Edition) <i>Anatomy and physiology of farm animals</i>. Philidelphia: Lea and Febiger.</li> <li>• Frape, D. (Current Edition) <i>Equine nutrition and feeding</i>. Oxford: Blackwell Scientific Ltd.</li> <li>• McDonald, P. (et al) (Current Edition) <i>Animal nutrition</i>. Longman Scientific &amp; Technical.</li> <li>• McKee, T. &amp; McKee, J.R. (Current Edition) <i>Biochemistry: an introduction</i>. McGraw-Hill.</li> <li>• Pond, W.G., Church, D.C. &amp; Pond, K.R. (Current Edition) <i>Basic animal nutrition and feeding</i>. John Wiley &amp; Sons, Inc.</li> <li>• Reece, W.O. (Current Edition) <i>Physiology of domestic animals</i>. Philadelphia: Lea and Febiger.</li> <li>• Ruckebusch, Y., Phaneuf, L-P. &amp; Dunlop, R. (Current Edition) <i>Physiology of small and large animals</i>. Philadelphia: BC Decker Inc.</li> </ul> <p>Websites and databases:</p> <ul style="list-style-type: none"> <li>• British Society of Animal Science <a href="http://www.bsas.org.uk">www.bsas.org.uk</a>.</li> </ul> <p>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.</p>

<b>Part 3: Assessment</b>			
<b>Assessment Strategy</b>	<p>The assessment strategy for the module is via an examination and an assignment.</p> <p>The examination has been chosen so 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 written assignment has been chosen so as to facilitate in depth utilisation of the information covered throughout the module, as well as via additional study. This will also facilitate the development of transferable skills, such as scientific writing and research.</p> <p>Feedback will be provided throughout the module via tutorial support, class discussions, short exercises and review of results of practical sessions, in addition to that written on assignment submissions and examination scripts.</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)	<b>A:</b>	<b>B:</b>	
	50%	50%	
<b>First Sit</b>			
<b>Component A (controlled conditions)</b>		<b>Element weighting</b>	
<b>Description of each element</b>			
1	Examination (1 hour)	100%	
<b>Component B</b>		<b>Element weighting</b>	
<b>Description of each element</b>			
1	Written assignment (1250 words)	100%	
<b>Resit (further attendance at taught classes is not required)</b>			
<b>Component A (controlled conditions)</b>		<b>Element weighting</b>	
<b>Description of each element</b>			
1	Examination (1 hour)	100%	
<b>Component B</b>		<b>Element weighting</b>	
<b>Description of each element</b>			
1	Written assignment (1250 words)	100%	
If a student is permitted an <b>EXCEPTIONAL RETAKE</b> of the module the assessment will be that indicated by the Module Description at the time that retake commences.			