University of the West of England
BRISTOL

CORPORATE AND ACADEMIC SERVICES

MODULE SPECIFICATION

Part 1: Basic data						
Module title	Animal Nutrition					
Module code	UINXK5-15-1		Level	1	Version	1
Owning faculty	Hartpury		Field	Animal and Land Science		
Contributes towards	FdSc Animal Science and Management FdSc Equine Science and Management BSc (Hons) Animal Science BSc (Hons) Bioveterinary Science BSc (Hons) Equine Science BSc (Hons) Equestrian Sports Science					
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		

CAP approval date	29 May 2013

Part 2: Learning and teaching	
Learning outcomes	On successful completion of this module students will be able to: 1 Compare the anatomy and physiology of the gastrointestinal tracts of named animals (A, B). 2 Understand the basic biochemistry of the six constituents of foods, and evaluate their importance in animal nutrition (A). 3 Analyse the scientific basis behind the nutrition of animals and metabolism (A, B). 4 Understand the practical skills in nutritional analysis (A,B). 5 Identify the physiological mechanisms involved in digestion and relate this to animal management (A, B). 6 Demonstrate laboratory skills to a high standard (B). 7 Make decisions and form judgments within time constraints and in a high pressure environment (A).
Syllabus outline	1 Study of anatomy, physiology and histology of the gastrointestinal tract of a range of animals. 2 The six constituents of foods: carbohydrates, protein, fats/lipids, water, minerals and vitamins necessary in nutrition, their digestion, absorption, synthesis and fate in the animal. 3 The laboratory techniques used for practical skills and analysis of feedstuff. 4 Feedstuff digestive trials and their relationship with digestive and metabolisable energies for specific animal species.

	5 Importance of grassland management in herbivorous animal diets; types of grasses and forages available; forage conservation and their nutritional impact on the nutritional status of the animal.
Contact hours	Indicative delivery modes: Lectures, guided learning, seminars etc 33 Self directed study 3 Independent learning 114 **TOTAL** **150**
Teaching and learning methods	A variety of learning strategies will be used including lectures, practicals and seminars and self-directed learning. Students will also be expected to engage in independent learning throughout the module including time to complete assessment work. ***Scheduled learning*** May include lectures, laboratory practicals, tutorials; work based learning and supervised time in the laboratory ***Independent learning*** May include 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 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.
Key information sets information	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. **<u>Key information set – module data</u>** Number of credits for this module: 15 Hours to be allocated: 150 | Scheduled learning and teaching study hours: 36 | Independent study hours: 114 | Placement study hours: 0 | Allocated hours: 150 The table below indicates as a percentage the total assessment of the module which constitutes a: 1 *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 50% Coursework assessment percentage 50% Practical exam assessment percentage 0% 100%
Reading strategy	***Essential reading*** 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. ***Further reading*** 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. ***Access and skills*** 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.
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. • Bacha, W.J. & Bacha, L.M. (Current Edition) *A colour atlas of veterinary histology*. Lippencott: Philadelphia PA. • Frandson, R.D. (Current Edition) *Anatomy and physiology of farm animals*. Philidelphia: Lea and Febiger. • Frape, D. (Current Edition) *Equine nutrition and feeding*. Oxford: Blackwell Scientific Ltd. • McDonald, P. (et al) (Current Edition) *Animal nutrition*. Longman Scientific & Technical. • McKee, T. & McKee, J.R. (Current Edition) *Biochemistry: an introduction*. McGraw-Hill. • Pond, W.G., Church, D.C. & Pond, K.R. (Current Edition) *Basic animal nutrition and feeding*. John Wiley & Sons, Inc. • Reece, W.O. (Current Edition) *Physiology of domestic animals*. Philadelphia: Lea and Febiger. Websites and databases: • British Society of Animal Science www.bsas.org.uk 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.

Part 3: Assessment			
Assessment strategy	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. The laboratory report assignment 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. 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. 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.		
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) **Description of each element**		**Element weighting**	
1	Written examination (1 hour)	100%	
Component B **Description of each element**		**Element weighting**	
1	Laboratory report (1,250 words)	100%	
Resit (further attendance at taught classes is not required)			
Component A (controlled conditions) **Description of each element**		**Element weighting**	
1	Written examination (1 hour)	100%	
Component B **Description of each element**		**Element weighting**	
1	Written assignment based on laboratory report (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.			