

MODULE SPECIFICATION PROFORMA

Module Title:	Nutrition & Feeding Practice	Level	5	Credit Value:	20
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Module code:	ANM516	Is this a new module	YES	Code of module being replaced:	None
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Cost Centre(s):	GAAN	<u>JACS3</u> code:	
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With effect from:	September 18
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School:	Social & Life Sciences	Module Leader:	Fernando da Mata
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Scheduled learning and teaching hours	50 hrs
Guided independent study	150 hrs
Placement	0 hrs
Module duration (total hours)	200 hrs

Programme(s) in which to be offered	Core	Option
BSc (Hons) Equine Science and Welfare Management	✓	<input type="checkbox"/>
BSc (Hons) Animal Science	✓	<input type="checkbox"/>

Pre-requisites
None

Office use only

Initial approval: June 17

APSC approval of modification: *Enter date of approval* Version: 1

Module Aims

To develop learners' understanding of nutrient groups and their value within the animal's diet.
To investigate ration formulation for animals of varying ages and situations.
To ensure animals' dietary needs are met.
To investigate the nutritional components of animal feeds and to understand how these are provided in the correct quantities in the animal's diet.

Intended Learning Outcomes

Key skills for employability

- KS1 Written, oral and media communication skills
- KS2 Leadership, team working and networking skills
- KS3 Opportunity, creativity and problem solving skills
- KS4 Information technology skills and digital literacy
- KS5 Information management skills
- KS6 Research skills
- KS7 Intercultural and sustainability skills
- KS8 Career management skills
- KS9 Learning to learn (managing personal and professional development, self-management)
- KS10 Numeracy

At the end of this module, students will be able to

Key Skills

At the end of this module, students will be able to		Key Skills	
1	Analyse the structure, role and value to the body of nutritional components of animal feed.	KS1	
		KS3	KS4
		KS6	
2	Critically analyse the composition of animal feed and the role of different feeds within the animal diet.	KS1	
		KS3	KS4
		KS6	KS10
3	Calculate feed rations for animals of varying ages and for different levels of 'work'.	KS1	
		KS3	KS4
		KS6	KS10

Transferable skills and other attributes

Research, presentation and evaluation of information, problem solving, communication skills, ICT skills, numeracy skills

Derogations

None

Assessment:

In-class test: The test will comprise multiple choice and short answer questions. Calculation of rations will be included.

Case Study: Diets will be formulated and evaluated for a chosen animal species in a given situation.

Assessment number	Learning Outcomes to be met	Type of assessment	Weighting (%)	Duration (if exam)	Word count (or equivalent if appropriate)
1	1-3	In-class test	50		2,000
2	1-3	Case Study	50		2,000

Learning and Teaching Strategies:

This module will be delivered through a series of lectures, seminars, problem based learning sessions and practical sessions. Practical situations and laboratory sessions will be used to underpin learners' theoretical knowledge.

Syllabus outline:

Nutritional components of animal feed.

- Characteristics, structure and role of nutrient groups (carbohydrate, fibre, fats, proteins, water, vitamins and minerals)
- Metabolism of nutrients within the body
- Cellular respiration, the Krebs' Cycle and protein synthesis

The composition of animal feed and compiling the animal diet.

- Feeds available to various animals
- Nutritional components of various feeds
- Suitability of feeds for different animals and different needs
- Dietary supplements and additives
- Prebiotics / probiotics

Dietary ration formulation.

- Calculating the maintenance diet
- Calculating the diet for work / production
- Formulating a ration for different needs (ages, work, production, special needs)
- Factors influencing the animal's diet (management, age, production, reproduction, work, health)
- Monitoring diets

Bibliography:

Essential reading

Frape, D. (2010) *Equine Nutrition and feeding. 4th Edition*. Chichester: John Wiley & Sons.
McDonald, P., Edwards, RA., Greenhalgh, JFD., Morgan, CA., Sinclair, LA., Wilkinson, RG. (2011) *Animal Nutrition*. Harlow: Pearson.

Other indicative reading

Case, LP, Daristotle, L, Hayek, M & Foess Raasch, M (2010) *Canine and Feline Nutrition*. Missouri: Elsevier.

Cheeke, PR. (2004) *Applied Animal Nutrition*. Wallingford: CABI.

Cheeke, PR., Dierenfeld, ES. (2010) *Comparative Animal Nutrition and Metabolism*. Wallingford: CABI.

Dryden, G (2008) *Animal Nutrition Science*. Wallingford: CABI.

MacLeod, C. (2007) *The truth about feeding your horse*. London: JA Allen.

McNamara, JP (2013) *Principles of Companion Animal Nutrition*. Harlow: Pearson.

Wortinger, A & Burns, K. (2015) *Nutrition and Disease*. Chichester: Wiley Blackwell.