

Nottingham Trent University Animal Science Modules

Final Year BSC (Hons) Animal Science (120 NTU credits 2022-23)					
1. Applied Animal Nutrition (20CP)	(2) Welfare Science (20CP)	(3) Dissertation (40CP)	(4) Animal Genetics (20CP)	(5) Optional: Anthrozoology (20CP)	(6) Optional: Adaptive Physiology (20CP)
Final Year BSC (Hons) Animal Science (120 NTU credits 2023 onwards)					
1. Applied Animal Nutrition (20CP)	(2) Welfare Science (20CP)	(3) Dissertation (40CP)	(4) Comparative Performance (20CP)	(5) Sustainable Animal Management (20CP)	

Nottingham Trent University

Module Specification

Basic module information		
1	Module Title:	Sustainable Animal Management
2	Module Code:	ANIM3XXXX
3	Credit Points:	20
4	Duration:	Full year
5	School:	Animal, Rural and Environmental Sciences
6	Campus:	Brackenhurst
7	Date:	September 2020

8 Pre, Post and Co-requisites:

These are modules that you must have studied previously in order to take this module, or modules that you must study simultaneously or in a subsequent academic session

Pre, Co, Post Module Code Module Title

9 Courses containing the module

<u>Level</u>	<u>Core/Option</u>	<u>Mode</u>	<u>Code</u>	<u>Course Title</u>
6	Core	FT, PT, SW	ANIM021/ 022/023	BSc (Hons) Animal Biology

10 Overview and Aims

- This module is designed to explore the practical application of research aimed at improving the sustainability of the managed animal and its environment. This will be achieved through lectures, practicals and a field trip.
- To critically analyse a range of globally trending topics and determining factors relating to sustainability in managed animals.
- To increase knowledge and understanding of the complexities and limitations of managing domestic species in an extensive, intensive or semi-natural system
- To increase understanding of sustainable animal husbandry techniques, including aspects such as nutrition, housing design and disease prevention and control.

11 Module Content

- Biosecurity
- Animal welfare education and legislation
- Sustainable animal housing
- Breeding
- Maintaining animal health/ Preventing and controlling disease
- Emerging zoonotic diseases- risks in different systems
- Comparing extensive, intensive and semi-natural animal management systems
- Environmental factors
- Basic economics of animal production
- Field trip
- Sustainability in Practice certificate

12 Indicative Reading

- Aland, A. and Madec, F. 2009. Sustainable animal production: The challenges and potential developments for professional farming. Wageningen academic Publishers.
- Turner, J. 2010. Animal Breeding, Welfare and Society. Routededge.
- Rushton, J. 2011. Economics of Animal Health and Production. CABI
- Webster, J. 2012. Animal Husbandry Regained: The Place of Farm Animals in Sustainable Agriculture, Routededge, London
- Zinsstag, J., Schelling, E., Waltner-Toews, D., Whittaker, M., Tanner, M. 2015. One Health: The Theory and Practice of Integrated Health. CABI.
- <https://www.bva.co.uk/media/1181/bva-position-on-uk-sustainable-animal-agriculture-full.pdf>

13 Learning outcomes

Learning outcomes describe what you should know and be able to do by the end of the module

Knowledge and understanding. After studying this module you should be able to:

- Critically evaluate the sustainable management of domestic species, including aspects such as legislation, housing, husbandry, animal welfare and disease prevention and control.
- Critically evaluate the impacts of sustainable animal management on native species, habitats and biodiversity
- Critically evaluate sustainable resource management

Skills, qualities and attributes. After studying this module you should be able to:

- Construct reasoned and evidence-based arguments that critically appraise issues related to the sustainable management of animals.

14 Teaching and Learning

<i>Range of modes of direct contact</i>	
This indicates the range of direct contact teaching and learning methods used on this module, e.g. lectures, seminars	
Field trip, lectures, tutorials, workshops, seminars and practical sessions	
Total contact hours:	52
<i>Range of other learning methods</i>	
This indicates the range of other teaching and learning methods used on this module, e.g. directed reading, research	
independent and directed reading,	
Total non-contact hours:	148

15	Assessment methods
This indicates the type and weighting of assessment elements in the module	
<u>Element number</u>	<u>Weighting</u> <u>Type</u> <u>Description</u>
1	100% Coursework Consultancy Report
Diagnostic/ formative assessment	
This indicates if there are any assessments that do not contribute directly to the final module mark	
A number of formative assessments will be carried out during the course of the module.	
Further information on assessment	
This section provides further information on the module's assessment where appropriate	

Document Management		
16	Module Title:	Sustainable Animal Management
17	Module Code:	ANIM3XXXX
18	Subject (JACS) Code	
19	Cost Centre	
20	School:	Animal, Rural and Environmental Sciences
21	Academic Team	Animal and Equine

22	Campus	Brackenhurst	
23	Other institutions providing teaching	<i>Please complete in box 23 a-d - if applicable</i>	
		Institution	%
23a	Other UK Higher Education or Further Education Institution- Please name Percentage not taught by NTU		
23b	Other public organisation in the UK- Percentage not taught by NTU		
23c	Other private organisation in the UK - Percentage not taught by NTU		
23d	Any other Non-UK organisation - Percentage not taught by NTU		
24	Date of approval:	21/9/16	

Nottingham Trent University

Module Specification

Basic module information		
1	Module Title:	Comparative Performance
2	Module Code:	ANIM3XXXX
3	Credit Points:	20
4	Duration:	Half year
5	School:	ARES
6	Campus:	Brackenhurst
7	Date this version first approved to run:	

8	<p>Pre, post and co-requisites:</p> <p>These are modules that you must have studied previously in order to take this module, or modules that you must study simultaneously or in a subsequent academic session</p> <p><u>Pre, Co, Post</u> <u>Module Code</u> <u>Module Title</u></p>
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9	<p>Courses containing the module</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Level</u></th> <th style="text-align: left;"><u>Core/Option</u></th> <th style="text-align: left;"><u>Mode</u></th> <th style="text-align: left;"><u>Code</u></th> <th style="text-align: left;"><u>Course Title</u></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">6</td> <td style="text-align: center;">Core</td> <td style="text-align: center;">FT</td> <td style="text-align: center;">ANIM</td> <td style="text-align: left;">BSc Animal Biology</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">PT</td> <td style="text-align: center;">ANIM</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">SW</td> <td style="text-align: center;">ANIM</td> <td></td> </tr> </tbody> </table>	<u>Level</u>	<u>Core/Option</u>	<u>Mode</u>	<u>Code</u>	<u>Course Title</u>	6	Core	FT	ANIM	BSc Animal Biology			PT	ANIM				SW	ANIM	
<u>Level</u>	<u>Core/Option</u>	<u>Mode</u>	<u>Code</u>	<u>Course Title</u>																	
6	Core	FT	ANIM	BSc Animal Biology																	
		PT	ANIM																		
		SW	ANIM																		

10	<p>Overview and aims</p> <p>This module is designed to develop greater depth and breadth of knowledge about factors affecting the performance of animals. The module applies a multidisciplinary approach to factors which contribute to optimal performance in a range of species. The module will incorporate recent advances in scientific research and technology and explore the impact of these on animal performance from a philosophical and ethical standpoint.</p> <p>The main aims of this module are to develop a knowledge and understanding of animal performance across a range of contexts and how performance can be impacted or improved by a range of factors.</p>
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11	<p>Module content</p>
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<p>Defining performance</p> <p>The animal athlete</p> <p>Animal performance in production systems</p> <p>Measuring and quantifying performance</p> <p>Profiling performance traits</p> <p>Improving performance</p> <p>Extrinsic factors that affect performance</p> <p>Development of sustainable approaches to future performance</p>

<p>12 Indicative reading</p> <p>Gillette, R. L., 2019. <i>Athletic and Working Dog: Functional Anatomy and Biomechanics</i>. RMG Enterprises</p> <p>Green, M., 2012. <i>Dairy Herd Health</i>. CABI Publishing</p> <p>Williams, J.M., 2015. <i>Training for Equestrian Performance</i>. Wageningen Academic Publishers</p>

<p>13 Learning outcomes</p> <p>Learning outcomes describe what you should know and be able to do by the end of the module</p>
<p>Knowledge and understanding. After studying this module you should be able to:</p>
<p>Demonstrate a knowledge and understanding of performance animal biology across a range of contexts</p> <p>Critically evaluate animal performance and appreciate how this can be changed by health, welfare and other extrinsic factors</p> <p>Demonstrate an understanding of current issues at the forefront of animal performance biology</p> <p>Critically evaluate methods of assessing animal performance</p>
<p>Skills, qualities and attributes. After studying this module you should be able to:</p>
<p>Show evidence of skills required to monitor and evaluate animal performance in a range of contexts</p> <p>Construct reasoned arguments to support a position on the ethical and social impact of advances in the biosciences and be able to apply relevant advanced numerical skills (including statistical analysis, where appropriate) to biological data</p>

<p>14 Learning and teaching</p> <p><i>Range of modes of direct contact</i></p> <p>This indicates the range of direct contact learning and teaching methods used on this module, e.g. lectures, seminars</p>

Lectures, seminars, workshops and practical sessions	
Total contact hours:	52
<i>Range of other learning methods</i>	
This indicates the range of other learning and teaching methods used on this module, e.g. directed reading, research	
Directed reading, research work,	
Total non-contact hours:	148

15 Assessment methods			
This indicates the type and weighting of assessment elements and sub-elements in the module			
<u>Element number</u>	<u>Weighting</u>	<u>Type</u>	<u>Description (include any sub-elements)</u>
1	100%	Coursework	Assignment: case study
Diagnostic/formative assessment			
This indicates if there are any assessments that do not contribute directly to the final module mark			
This module will have formative assessments at various stages of learning, including workshops, that will provide timely feedback to support the summative assessment.			
Further information on assessment			
This section provides further information on the module's assessment where appropriate			

Document management	
16	Module Title: Comparative Performance
17	Module Code: ANIM3XXXX
18	Subject (JACS) Code:
19	Cost Centre:

20	School:	Animal, Rural and Environmental Sciences
21	Academic Team:	Animal and Equine
22	Campus:	Brackenhurst
23	Other institutions providing teaching:	<i>Please complete in box 23 a-d - if applicable</i>
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23c	Other private organisation in the UK - Percentage not taught by NTU	
23d	Any other Non-UK organisation - Percentage not taught by NTU	
24	Date this version was formally approved by the School Academic Standards and Quality Committee (SASQC) or Development Approval Group (DAG):	