



Title:	Animal Welfare Strategies APPROVED
Long Title:	Animal Welfare Strategies
Module Code:	AGRI8016
Duration:	1 Semester
Credits:	5
NFQ Level:	Advanced
Field of Study:	Agriculture
Valid From:	Semester 1 - 2021/22 (September 2021)
Module Delivered in	1 programme(s)
Module Coordinator:	Brigid Lucey
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Module Description:	This module will provide a practical understanding of welfare and ethical issues connected with farm animals in terms of husbandry and on-farm research. Related topics such as animal husbandry, transport, slaughter, nutritional, behavioural and environmental factors will be explored. The use of statistical analysis tools in animal welfare and ethics, and interpretation of animal-related datasets will be practically applied to case studies.
Learning Outcomes	
<i>On successful completion of this module the learner will be able to:</i>	
LO1	Discuss the role of legislation at farm level in the promotion of animal health and welfare
LO2	Compare the manifestation, prevention and treatment strategies of common diseases in domestic animal species
LO3	Evaluate the role of key behavioural and environmental factors in the determination of animal health and welfare status
LO4	Apply appropriate animal welfare principles to critique and design experimental studies involving domestic animal species
LO5	Generate, analyse and interpret data sets applicable to experiments involving domestic animal species
Pre-requisite learning	
Module Recommendations	
<i>This is prior learning (or a practical skill) that is strongly recommended before enrolment in this module. You may enrol in this module if you have not acquired the recommended learning but you will have considerable difficulty in passing (i.e. achieving the learning outcomes of) the module. While the prior learning is expressed as named CIT module(s) it also allows for learning (in another module or modules) which is equivalent to the learning specified in the named module(s).</i>	
Incompatible Modules	
<i>These are modules which have learning outcomes that are too similar to the learning outcomes of this module. You may not earn additional credit for the same learning and therefore you may not enrol in this module if you have successfully completed any modules in the incompatible list.</i>	
No incompatible modules listed	
Co-requisite Modules	
No Co-requisite modules listed	
Requirements	
<i>This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed. You may not enrol on this module if you have not acquired the learning specified in this section.</i>	
No requirements listed	

Module Content & Assessment

Indicative Content

Animal Welfare Considerations

The Five Freedoms. Appropriate EU directives (i.e., 98/58/EC, 2010/63/EU) and Irish legislation (i.e., Animal Health and Welfare Acts 2013 and 2019, SI No 543 of 2012). Welfare assessment systems. Animal handling methods, safe transport mechanisms. Ethics at farm level. Consumer attitudes to welfare and animal products. Role of breeding and genetics in animal welfare.

Common Farm Diseases

Manifestations, prevention strategies and treatment options for diseases associated with farm environments and selected species, such as; campylobacteriosis, PRSS, Q fever, ringworm, infectious bovine rhinotracheitis, toxoplasmosis, lameness, leptospirosis, cryptosporidiosis, bovine viral diarrhoea, Johne's disease, tuberculosis, fasciolosis.

Behavioural and Environmental Concerns

Biosecurity hazards. Role of nutrition, housing, handling and hygiene and potential impacts on animal welfare status. Observation and measurement of common animal behaviours in domestic animal species associated with positive (i.e., social interaction, exploration, body condition) and negative (i.e., increased aggression, apathy, failure in sexual behaviour, anxiety) welfare statuses.

Experimental Design

Animal ethics and use of the 3Rs, the scientific method, experimental design steps, confounding variables & bias, sampling size calculation, sampling methods, validation and control in experimental design. Appropriate usage of medicinal products (i.e., antibiotics, analgesics), anaesthetics and euthanasia on farm and in research studies.

Biostatistics

Use of statistical tools and methods for validation, quality control and interpretation, summary statistics, data distribution, normality testing, parametric and non-parametric inference testing, correlation and regression

Assessment Breakdown

	%
Course Work	100.00%

Course Work

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Written Report	Critical analysis of relevant animal health and welfare case studies	1,2,3,4	60.0	Every Second Week
Performance Evaluation	Statistical analysis and interpretation of animal-related experimental designs and datasets	3,4,5	40.0	Week 13

No End of Module Formal Examination

Reassessment Requirement

Coursework Only

This module is reassessed solely on the basis of re-submitted coursework. There is no repeat written examination.

The institute reserves the right to alter the nature and timings of assessment

Module Workload

Workload: Full Time				
<i>Workload Type</i>	<i>Workload Description</i>	<i>Hours</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Lecture	Theory, concepts & case studies	3.0	Every Week	3.00
Independent & Directed Learning (Non-contact)	Self-directed learning/case study analysis	4.0	Every Week	4.00
Total Hours				7.00
Total Weekly Learner Workload				7.00
Total Weekly Contact Hours				3.00

Workload: Part Time				
<i>Workload Type</i>	<i>Workload Description</i>	<i>Hours</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Lecture	Theory, concepts & case studies	3.0	Every Week	3.00
Independent & Directed Learning (Non-contact)	Self-directed learning/case study analysis	4.0	Every Week	4.00
Total Hours				7.00
Total Weekly Learner Workload				7.00
Total Weekly Contact Hours				3.00

Module Resources
<i>Recommended Book Resources</i>
<ul style="list-style-type: none"> • Appleby et al. 2018, <i>Animal Welfare</i>, 3rd Ed., CABI Wallingford, United Kingdom [ISBN: 9781786390202]
<i>Supplementary Book Resources</i>
<ul style="list-style-type: none"> • Baldi & Moore 2017, <i>Practice of Statistics in the Life Sciences</i>, 4th Ed., W.H. Freeman & Co. New York, United States [ISBN: 9781319013370]
<i>This module does not have any article/paper resources</i>
<i>Other Resources</i>
<ul style="list-style-type: none"> • Website: <i>Principles of Animal Behaviour</i> http://www.grandin.com

Module Delivered in

Programme Code	Programme	Semester	Delivery
CR_SAGBI_8	Bachelor of Science (Honours) in Agri-Biosciences	7	Mandatory