

Module Title:	Animal and Plant Biology
Language of Instruction:	English
Credits:	5
NFQ Level:	6
Module Delivered In	4 programme(s)
Teaching & Learning Strategies:	Formal lectures will be supplemented by laboratory work as individuals and where appropriate, in groups. The lecturer will balance the learning experience to ensure that the learner obtains knowledge through doing as well as through formal lecturers. This will allow them to understand the biological processes that underpin animal and plant systems. Case studies will be presented to demonstrate important biological processes as they apply to food production. Practical learning experiences will delivered through the use of field labs to demonstrate ecosystem biology as well as various dissection labs to demonstrate biological function in animals and plants. An emphasis will be placed on health and safety in biological studies throughout.
Module Aim:	The module aims to provide the learner with a solid understanding of the biological process that underpin the function of animals and plants.
Learning Outcomes	
<i>On successful completion of this module the learner should be able to:</i>	
LO1	Display knowledge of the principal biological processes in animals and plants
LO2	Be capable of understanding the microstructures of animal and plant cells
LO3	Display an understanding of the biology that underpins ecosystems in an agricultural context
Pre-requisite learning	
Module Recommendations <i>This is prior learning (or a practical skill) that is recommended before enrolment in this module.</i>	
No recommendations listed	
Incompatible Modules <i>These are modules which have learning outcomes that are too similar to the learning outcomes of this module.</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.</i>	
No requirements listed	

Module Content & Assessment

Indicative Content

Animal and Plant Physiology

A detailed exploration of animals and plants at a cellular, tissue, organ and body level. Particular emphasis will be placed on plants and animals of agricultural importance including those of the wider farm ecosystem. Through a combination of classroom, lab and field based learning; the student will be exposed to: - Plants of agricultural and horticultural significance - Plants from the wider ecosystem including non-vascular plants and non-flowering vascular plants - Invertebrate animals including insects, molluscs, nematodes and segmented worms - Vertebrate animals including those used for food production

Ecosystem Biology

A detailed overview of animal and plant interactions within the farm systems and wider environment. Selected plants and animals will be used to demonstrate the wider ecosystem services of plants animals and the biodiversity of animal life in Ireland's terrestrial and aquatic environment. A typical mixed farm system will be used to demonstrate the flora and fauna that exist within the farm and how measures taken at farm level can have an impact on these. This will include a biological assessment of the soil, hedgerows and fresh water streams on the farm.

Assessment Breakdown	%
Practical	50.00%
End of Module Formal Examination	50.00%

No Continuous Assessment

No Project

Practical

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Practical/Skills Evaluation	Students will be expected to produce a one-to-two-page summary of their lab session summarising the importance of the topic covered, the methodology and outcomes. Sketches of the outcomes will be encouraged where appropriate. The report should be typed with sketches included as figures. It will be handed in a timely manner and general feedback will be given in subsequent lab sessions.	1,2,3	50.00	n/a

End of Module Formal Examination

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Formal Exam	Terminal Examination		50.00	End-of-Semester

SETU Carlow Campus reserves the right to alter the nature and timings of assessment

Module Workload

Workload: Full Time		
<i>Workload Type</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Lecture	12 Weeks per Stage	1.50
Laboratory	12 Weeks per Stage	1.50
Independent Learning	12 Weeks per Stage	3.00
Total Hours		72.00

Module Delivered In

Programme Code	Programme	Semester	Delivery
CW_SWOAG_B	Bachelor of Science (Honours) in Organic Agriculture	2	Mandatory
CW_SWSFM_B	Bachelor of Science (Honours) in Sustainable Farm Management and Agribusiness	2	Mandatory
CW_SWOAG_D	Bachelor of Science in Organic Agriculture	2	Mandatory
CW_SWSFM_D	Bachelor of Science in Sustainable Farm Management and Agribusiness	2	Mandatory