

Module Title:	Sustainable Cropping Systems		
Language of Instruction:	English		
Credits:	5		
NFQ Level:	6		
Module Delivered In	4 programme(s)		
Teaching & Learning Strategies:	Formal lectures will be complemented by practical field sessions that allows for a balance of theory and hands on learning activities. Classroom activities will focus on the management of combinable crops and grassland including the economics of various crops that are grown in Ireland. Visiting lecturers will be used where appropriate to enhance the learning experience of the students and expose them to new concepts in crop production. Learners will brought to selected tillage and grassland farms in the South East to discuss the management concepts for crop production.		
Module Aim:	This module aims to build upon knowledge acquired during Year 1, specifically focusing on methods that can enhance the sustainability of crop production in Ireland. Students will learn how to critically assess various cropping options from an environmental and economic perspective.		
Learning Outcomes			
On successful completion of this module the learner should be able to:			
LO1	Critically assess the economics of producing various cereal and break crops in Ireland		
LO2	Identification and control of weeds in managed pasture and cropping systems		
LO3	Management of cereal and break crops including the strategic use of rotations to enhance the sustainability of crop production		
LO4	Application of nutrient managements strategies to optimise sustainable crop production		
Pre-requisite learning			
Module Recommendations			
This is prior learning (or a practical skill) that is recommended before enrolment in this module.			
7844	FARM H1717	Introduction to Crop Production	
Incompatible Modules			
These are modules which have learning outcomes that are too similar to the learning outcomes of this module.			
No incompatible modules listed			
Co-requisite Modules			
No Co-requisite modules listed			
Requirements			
This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.			
Students should have studied Introduction to Crop Production or an equivalent subject prior to this module.			

Module Content & Assessment

Indicative Content

Crop Rotations

Why crop rotations are important. Soil, disease, environment, yield benefits

Weed control

Identification of common agricultural weeds. Knowledge of their life cycles. How to control common weeds.

Economics of crop production

Understanding of the costs associated with crop production. Fertiliser, pesticides, machinery, seeds etc.

Nutrient Management

Nutrients required for sustainable crop production. Artificial and non - artificial fertilisers. Planning of nutrient applications.

Assessment Breakdown

	%
Continuous Assessment	50.00%
End of Module Formal Examination	50.00%

Continuous Assessment

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Portfolio	Students will be required to gather samples of weeds from agricultural locations. The weeds will be identified and information relating to the weeds and their control will be gathered.	2	25.00	n/a
Project	Students will complete an integrated cropping plan for a farm that includes the division of work load, economics of production and the use of rotations. This plan will be delivered through oral presentation to peers.	1,3,4	25.00	n/a

No Project

No Practical

End of Module Formal Examination

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Formal Exam	An end of year exam will take place covering aspects of crop production delivered during the term	1,3,4	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	Every Week	2.00
Practicals	Every Week	1.00
Independent Learning	Every Week	3.00
Total Hours		6.00

Module Delivered In

Programme Code	Programme	Semester	Delivery
CW_EFARG_B	Bachelor of Engineering (Honours) in Agricultural Systems Engineering	4	Mandatory
CW_EFARG_D	Bachelor of Engineering in Agricultural Systems Engineering	4	Mandatory
CW_SWSFM_B	Bachelor of Science (Honours) in Sustainable Farm Management and Agribusiness	4	Mandatory
CW_SWSFM_D	Bachelor of Science in Sustainable Farm Management and Agribusiness	4	Mandatory