

Module Title:	Fundamentals of Protected Cropping Systems in Organic Agriculture
Language of Instruction:	English
Credits:	5
NFQ Level:	6
Module Delivered In	2 programme(s)
Teaching & Learning Strategies:	Classroom activities will focus on the different protected structures used by organic growers, crop rotation and design and the market opportunities for organic crops. Practical field work will also be a key feature of the learning and will incorporate plant raising, maintenance and harvesting techniques. Field visits will expose learners to commercial production and will enhance classroom learning.
Module Aim:	The module will focus on the key factors that underpin protected horticultural crops within an organic system. Upon completion, the learner will be familiar with the role protected cropping plays in a wider horticultural enterprise and understand the basic technical aspects of production including regulatory requirements. Exploration of market demand and potential growth opportunities is also a feature of this module.
Learning Outcomes	
<i>On successful completion of this module the learner should be able to:</i>	
LO1	Demonstrate an understanding of the different protected cropping structures, and the market opportunities in organic fruit and vegetable production.
LO2	Demonstrate an understanding of the crops suitable for production in protected cropping structures in Ireland.
LO3	Design a basic crop plan for a protected structure for one season.
LO4	Demonstrate an understanding of the management of irrigation systems in protected cropping.
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

Market for protected crops

Learners will examine the variety of protected cropping structures and crops grown. This module covers the fundamentals of protected cropping in organic horticulture, the market requirements, and specifications. Formal lectures will be complemented by practical field work exposing the learner to protected cropping management.

Crop Production

Learners will explore the importance of rotations in protected cropping, fertility management, and weeding techniques. Field visits to commercial organic production units will be incorporated into the module to enhance the practical learning.

Water management in protected cropping

The effective management of irrigation systems for protected cropping in the context of the main crop families grown in protected structures and their specific requirements will be explored. Water usage, water quality and requirements for water testing for pathogens as part of the organic regulations will be part of the practical learning. Irrigation and disease management will also be examined. Field visits will compliment classroom learning for this module.

Assessment Breakdown	%
Continuous Assessment	20.00%
Project	30.00%
Practical	50.00%

Continuous Assessment

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Written Report	Students will write reports based on site visits to organic commercial horticultural units using protected cropping and associated case studies.	1,2,3	20.00	n/a

Project

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Project	Students are required to design a crop plan for a protected structure for one growing season.	1,2,3,4	30.00	n/a

Practical

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Practical/Skills Evaluation	Students will be expected to partake in practical learning activities and produce a two page summary of each activity 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.	1,2,3,4	50.00	n/a

No End of Module Formal Examination

Continuous Assessment

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Written Report	Students will write reports based on site visits to organic commercial horticultural units using protected cropping and associated case studies.	1,2,3	20.00	n/a

Project

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Project	Students are required to design a crop plan for a protected structure for one growing season.	1,2,3,4	30.00	n/a

Practical				
<i>Assessment Type</i>	<i>Assessment Description</i>	<i>Outcome addressed</i>	<i>% of total</i>	<i>Assessment Date</i>
Practical/Skills Evaluation	Students will be expected to partake in practical learning activities and produce a two page summary of each activity 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.	1,2,3,4	50.00	n/a

No End of Module Formal Examination

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

Module Workload

Workload: Full Time		
Workload Type	Frequency	Average Weekly Learner Workload
Lecture	12 Weeks per Stage	2.00
Practicals	12 Weeks per Stage	1.00
Independent Learning Time	12 Weeks per Stage	3.00
Total Hours		72.00

Workload: Part Time		
Workload Type	Frequency	Average Weekly Learner Workload
Lecture	12 Weeks per Stage	2.00
Practicals	12 Weeks per Stage	1.00
Independent Learning Time	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	3	Mandatory
CW_SWOAG_D	Bachelor of Science in Organic Agriculture	3	Mandatory