

Module Title:	Advanced Crop Production
Language of Instruction:	English
Credits:	10
NFQ Level:	8
Module Delivered In	No Programmes
Teaching & Learning Strategies:	The module aims to build upon the skills acquired from the Crop Production, Protection and Weed Science' module. Students will acquire the skillset necessary to critically evaluate the economics and biology of producing crops. The breadth of crops will be broadened to include oilseeds and protein crops as well as alternative forage crops and where they could fit into a sustainable crop rotation. Grassland management skills will be further developed to include planning the infrastructure required for optimal grassland management. Formal lectures will be supplemented by case study and group work. A mixture of formal lectures along with facilitated crop walks and discussion group type activity to encourage the learner to critically analyse aspects of crop production. Learners will follow crop management on their own farms or selected farms in the area and critically analyse the inputs required as well as the production and financial returns. Where changes in management are being made a critical appraisal through group learning will be used. Visiting Lecturers on aspects relating to crop production will be used to broaden the learning experience. Students will also visit selected farms and agri-businesses/seed suppliers to discuss grassland management, identification of productivity and utilization problems and their solution. Cases will be appropriate to the learner group
Module Aim:	The module aims to build upon the skills acquired from the Crop Production, Protection and Weed Science' module. Students will acquire the skillset necessary to critically evaluate the economics and biology of producing crops. The breadth of crops will be broadened to include oilseeds and protein crops as well as alternative forage crops and where they could fit into a sustainable crop rotation. Grassland management skills will be further developed to include planning the infrastructure required for optimal grassland management.
Learning Outcomes	
<i>On successful completion of this module the learner should be able to:</i>	
LO1	Management of alternative combinable crops including proteins and oilseeds
LO2	The use of integrated pest management as it applies to sustainable agricultural systems.
LO3	Appraisal of alternative forages to grassland and where they fit in an integrated crop-livestock production system
LO4	Be capable of designing pasture infrastructure to facilitate the optimal grassland production for the soil type and location
LO5	Have an appreciation of the most up to date regulations in the area of crop production including environmental and health issues. Critically, the student will acquire the skills necessary to keep abreast of various legislation as it evolves and impacts upon their business.
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
Integrated pest management • Rotations • Alternative forage selection • Cultural control • Establishment of critical thresholds for the control of crop pests and diseases
The role for integrated crop-livestock productions systems • Use of forages in the rotation in tillage/ vegetable producers • Animal manures and their role in improving soil organic matter
Optimising grassland utilisation and quality • Tools for the assessment of grass cover • grazing systems including zero grazing • Infrastructure for improved grassland utilisation

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
Project	Short project critiquing management practices of a crop of choice identifying areas where change would be recommended		20.00	n/a
Practical/Skills Evaluation	Plan for upgrading the grazing facilities on a selected farm including expected benefits of the upgrading.		20.00	n/a
Essay	Essay		10.00	n/a

No Project

No Practical

End of Module Formal Examination				
Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Formal Exam	Terminal Examination	1,2,3,4,5	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	30 Weeks per Stage	2.00
Practicals	30 Weeks per Stage	1.00
Independent Learning	30 Weeks per Stage	3.67
Total Hours		200.00

