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| Module Title: | Protected Cropping Systems in Organic Agriculture | | |
| Language of Instruction: | English | | |
| | | | |
| Credits: | 5 | | |
| | | | |
| NFQ Level: | 7 | | |
| | | | |
| Module Delivered In | 2 programme(s) | | |
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| Teaching & Learning Strategies: | A combination of classroom, field work, site visits and guest speaker sessions will be offered to ensure every opportunity is given to learners to gain a thorough understanding of all aspects of crop production in this module. Classroom activities will include comprehensive crop and rotation design, fertility and weed management, and pest and disease control to ensure successful crop production. The additional learning strategies such as practical work, site visits and guest speakers are incorporated to enhance the classroom learning. | | |
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| Module Aim: | This module will give the learner an advanced understanding of organic protected cropping systems including agricultural organic practices, plant hygiene and market specifications. Rotational design will form a core aspect of this module thereby ensuring learners have skills to successful plan for crop production over an extensive rotation period for a commercial horticultural unit that uses protected cropping. | | |
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| Learning Outcomes | | | |
| On successful completion of this module the learner should be able to: | | | |
| LO1 | Demonstrate an ability to design a crop plan for protected cropping enterprises including fruit, vegetables, and herbs for a full calendar year. | | |
| LO2 | Design a fertility management plan for a five-year rotation in a polytunnel or glasshouse. | | |
| LO3 | Demonstrate an understanding of the use of biological pest control in protected cropping. | | |
| LO4 | Demonstrate an understanding of disease management of crops grown in protected structures. | | |
| | | | |
| Pre-requisite learning | | | |
| Module Recommendations | | | |
| This is prior learning (or a practical skill) that is recommended before enrolment in this module. | | | |
| 10814 | AGRI C2703 | Fundamentals of Protected Cropping Systems in Organic Agriculture | |
| 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 are expected to have studied Protected Cropping Systems in Organic Agriculture- Fundamentals prior to studying this module. | | | |

Module Content & Assessment
Indicative Content
Crop Rotations and Fertility Management

Students will learn the advanced techniques of crop design to ensure successful crop production for an entire rotation period. Fertility requirements and management techniques will form a core aspect of this module. The learner will become familiar with the incorporation of soil nutrients, compost, foliar feeds in terms of improving soil fertility in cropping structures. Weed control and associated techniques will be incorporated into the module.

Organic Pest Control in Protected Cropping Systems

Learners will examine pest control in organic production. Differentiation of biological and cultural control methods will be explored in a practical setting. The learning will include familiarisation with crop pests and management techniques. Practical work in a protected cropping environment will assist the information accumulated in the formal lectures.

Organic Disease Control in Protected Cropping Systems

Disease management is critical in organic systems and students will explore the main disease problems in protected cropping. Crop nutrition, hygiene management, soil borne diseases and remedial actions will be explored. Site visits to organic farms with protected cropping will benefit classroom learning.

| Assessment Breakdown | % |
|----------------------------------|--------|
| Project | 30.00% |
| Practical | 20.00% |
| End of Module Formal Examination | 50.00% |

No Continuous Assessment

Project

| Assessment Type | Assessment Description | Outcome addressed | % of total | Assessment Date |
|-----------------|---|-------------------|------------|-----------------|
| Project | Students are required to design a comprehensive crop plan for a protected structure for a full rotation, including fertility and weed management. | 1,2,3,4 | 30.00 | n/a |

Practical

| Assessment Type | Assessment Description | Outcome addressed | % of total | Assessment Date |
|-----------------------------|---|-------------------|------------|-----------------|
| Practical/Skills Evaluation | Students will compete practical examinations that demonstrate an understanding of the main diseases and pests that affect protected crops | 3,4 | 20.00 | n/a |

End of Module Formal Examination

| Assessment Type | Assessment Description | Outcome addressed | % of total | Assessment Date |
|-----------------|------------------------|-------------------|------------|-----------------|
| Formal Exam | End of Semester Exam | 1,2,3,4 | 50.00 | End-of-Semester |

No Continuous Assessment

Project

| Assessment Type | Assessment Description | Outcome addressed | % of total | Assessment Date |
|-----------------|---|-------------------|------------|-----------------|
| Project | Students are required to design a comprehensive crop plan for a protected structure for a full rotation, including fertility and weed management. | 1,2,3,4 | 30.00 | n/a |

Practical

| Assessment Type | Assessment Description | Outcome addressed | % of total | Assessment Date |
|-----------------------------|---|-------------------|------------|-----------------|
| Practical/Skills Evaluation | Students will compete practical examinations that demonstrate an understanding of the main diseases and pests that affect protected crops | 3,4 | 20.00 | n/a |

End of Module Formal Examination

| Assessment Type | Assessment Description | Outcome addressed | % of total | Assessment Date |
|-----------------|------------------------|-------------------|------------|-----------------|
| Formal Exam | End of Semester Exam | 1,2,3,4 | 50.00 | End-of-Semester |

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

Module Workload

| Workload: Full Time | | |
|---------------------------|--------------------|---------------------------------|
| 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 | 5 | Mandatory |
| CW_SWOAG_D | Bachelor of Science in Organic Agriculture | 5 | Mandatory |