

## Genetic Techniques and Innovation

### Applying for this course:

This course is targeted at those learners who would like to work as a Gardener, Landscaper, Farmer or Horticulturalist. To successfully complete this course, learners need to learn about the various tasks and methods used in this field of work. This course is aimed at those individuals who wish to work in this profession for the very first time, or for those persons who are already working in this line of profession but wish to further enhance their existing skills.

Trainees should be 16 years of age, have an MQF Level 1 school leaving certificate and have an MQF level 2 qualification in Award in Principles of Gardening and Landscaping or other similar qualifications including the Certificate of Competence for Gardener and Horticulturalist.

### Course Duration

This course is of 12 hours duration and consists of one Module - (including 2-hours assessment).

### General pedagogical guidelines and procedures for this course:

The delivery of this Course will be mainly held through a series of discussions, hands-on exercises and fieldwork. The trainer will also be holding lessons with the learners which will consist of various presentations. Since this course will be pegged to MQF level 3, learners will be expected to do further research on the topics dealt with during the classroom activities.

### General assessment policy and procedures for this course:

The assessment will vary from one module to the other. The learner will be assessed through written assessments that will take place by the end of each module, to assess and consolidate the learning being covered. Assessments include written assessments, case studies, and projects.

Ongoing assessments will also take place throughout each module. These do not have a weighting on the total mark obtained.

For this module, the learner will be assessed through a written assignment and a presentation.

### Module 3 Learning Outcomes – Genetic Techniques and Innovation

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| <ul style="list-style-type: none"><li>✓ Be responsible for evaluating the benefits of GMOs in agriculture, such as increased crop yield, pest resistance, and nutritional enhancement.</li><li>✓ Deal with the controversies surrounding GMOs, including ethical, environmental, and health concerns, to make informed decisions in agricultural practices.</li><li>✓ Ensure understanding of the techniques and technologies involved in the development of GMOs and their role in modern agriculture.<br/>Ensure the evaluation of the benefits of GMOs, including increased crop yield, pest resistance, and</li></ul> | <ul style="list-style-type: none"><li>✓ Comply with the ethical, environmental, and health concerns surrounding the use of GMOs, making informed judgments on their implications.</li><li>✓ Deal with the integration of aquaponics and other agricultural innovations, assessing their effectiveness and potential for sustainable farming practices.</li><li>✓ Compare and contrast traditional and modern agricultural practices, demonstrating an understanding of their evolution and relevance in current agricultural systems.</li></ul> |
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enhanced nutritional value, in practical agricultural applications.	
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### **Module 3 Assessment:**

Learners will be assessed through ongoing assessment by way of oral exercises and practical/hands-on sessions throughout the entire course. The Ongoing Assessment will not have a weighting on the total mark obtained.

By the end of the module, learner will have to submit a written assignment on the subject matter and also deliver a presentation on the same topic, of between 7-10 minutes duration. The pass mark is that of 45%.

The Malta Further and Higher Education Authority (MFHEA) deems this certificate to be at Level 3 of the Malta Qualifications Framework and the European Qualifications Framework for Lifelong Learning. This course comprises study modules to which a total of 28 ECTS points are assigned.