

BAGB114 Principles of Horticulture

ECTS Value: 5 ECTS

Overall Objectives and Outcomes

This is a highly practical unit which provides participants with the necessary set of skills needed to undertake horticultural tasks. They will learn how to use various agricultural machinery and tools crucial for the management and operation of an agricultural/ horticultural enterprise. Furthermore, plant propagation, pruning and grafting's theoretical underpinnings and skills necessary for their successful undertaking will then follow. This will be done in a setting that will allow participants to practice these skills for their subsequent mastery. Acquiring such skills is crucial in the vocational educational framework of eventual agribusiness teachers as apart from the passing on of such skills to students, these will allow them to better operate, manage and take better decision in any (school) horticultural setting.

By the end of this module, the learner will be able to:

Competences

- a. appraise the various horticulture equipment and their use in various circumstances;
- b. demonstrate an ability to produce plants through the use of appropriate propagation techniques;
- c. demonstrate an ability to grow plants through the undertaking of the operation of various tools and techniques using the necessary health and safety precautions.

Knowledge

- a. describe purpose for use of various soil tilling equipment;
- b. compare and contrast various propagation techniques;
- c. compare and contrast various potting/seeding media;
- d. describe purpose for use of various hand tools;
- e. compare and contrast characteristics of various water pumps;
- f. outline procedure that needs to be followed to prune and graft a range of trees;
- g. explain the health and safety procedures that must be followed when using agricultural machinery.

Skills

- a. use the right tilling equipment for specific purposes following the required health and safety procedures;

- b. use the right propagation technique for various plants in accordance with required health and safety procedures;
- c. use the right hand-tool for specific purposes following the required health and safety procedures;
- d. install an irrigation system;
- e. decide on best potting/seeding medium for specific purposes;
- f. choose best water pump and irrigation system for various crops;
- g. prune a range of fruit/urban trees and/or shrubs/hedges;
- h. graft a range of trees;
- i. work in a team to install an irrigation system;
- j. present rationale for pruning used on a range of trees/shrubs;
- k. work in a team to change rotovator tilling attachments;
- l. suggest improvements in the way a range of trees were pruned;
- m. ensure that health and safety procedures are always used when operating tools and equipment;
- n. keep a digital inventory of tools and/or equipment and/or consumables

Mode of Delivery

This module adopts a blended approach to teaching and learning. Information related to the structure and delivery of the module may be accessed through the IfE Portal. For further details, kindly refer to the Teaching, Learning and Assessment Policy and Procedures found on the Institute for Education's website.

Assessment Methods

This module will be assessed through: Practical Assessment and Presentation

Suggested Readings

Core Reading List

1. Adams, C. and Early, M. (2011), Principles of Horticulture. Butterworth-Heinemann, UK.
2. Miller, D. (2017). Horticulture: Principles and Practices.
3. Toogood, A. (1999). Plant Propagation. American Horticultural Society, US

Supplementary Reading List

1. Brickell, C. & Joyce, D. (2017). Pruning & Training, Revised New Edition: What, When & How to Prune. DK, UK