



## **Department of Horticulture and Crop Science**

### **0601101 Principles of Plant Production**

**Horticultural crops including classification, structure, growth and development, reproduction, horticultural environment ,horticultural technology, propagation, mineral nutrition, training and pruning, growth regulation, horticultural and production systems**

#### **Horticulture , Floriculture and Forestry**

**This course deals with importance of fruit tree growing, classification of fruit tree crops, orchard establishment ( site selection, rootstocks, cultivars, planting systems, and frost protection), flowering, fruit set, fruit drop and fruit growth and maturation, cultural practices (pruning and training systems, fruit thinning, fertilizer application, irrigation, and pest control), harvesting and handling, and use of plant growth regulators.**

### **0601211 Floriculture**

**Production and maintenance of major and secondary cut flowers, flowering and foliage pot plants, bulbous plants, bedding plants, hanging baskets, trees, shrubs, hedges, other ornamentals, turf grass establishment and maintenance.**

### **0601311 Cut Flowers Production**

### **0601313 Forestry Science 2 3 3 0601101**

**Introduction, influences of forestry science, dendrology and forest trees classification. Forest ecology, ecological factors and their influences on forest growth and development. Afforestation and Forest management. Role of forestry in sustainable development. Agro-forestry systems. Windbreak and shelter belt plantings. Forest protection, measurement and harvesting. Forests and afforestation in Jordan.**



## **0601410 Woody Plant Materials**

**This module is designed to cover the soft landscape elements of woody materials.**

### **Vegetables**

**Principles of production and transplants production industry. Vegetable crops:**

**Importance, classification, proper environmental conditions suitable for their growth, different cultural practices for production, flowering, fruiting, maturity, harvesting and storage.**

### **Field Crops**

**Theoretical and practical information related to production of some cultivated plants and common wild species in the local habitat, included also geographical distribution of medicinal and aromatic plants related to environment and its various factors, cultural practices required for economic production of these plants. Taxonomy, botanical classification, habitat, active constituents, plant parts used.**

## **0601332 Herbaceous Ornamental Plants**

**This course focuses on the use of herbaceous plants as an important design element. Topics include plant characteristics, cultural requirements, environmental factors,**

## **0601333 Vines and Ground Cover**

**This module emphasizes on identification, propagation, use of ground covers and vines. Turf grass establishment and maintenance will be covered.**



### **0601334 Indoor Plants**

**This module will cover the identification, cultural requirements and growth habits**

**of ornamental foliage and flowering plants for indoor use.**

**Genetics, Physiology and Propagation**

### **0601241 Crop Physiology**

**Control of crop physiological processes in relation to genetic, enzymatic, hormonal and phytochrome systems. Crop water status, nutrition and energy**

**metabolism in relation to yield. Photosynthesis, transport, and accumulation of**

**photosynthesis. Use of plant growth regulators in agriculture. Crop growth and**

**development in relation to environment. Stresses and their effects on crop growth, adaptations, and acclimatization.**

### **0601341 Plant Propagation**

**General aspects of propagation, biology of propagation, environmental factors ,**

**principles of seed selection, techniques of propagation, vegetative propagation;**

**selection and management of clones, biology and techniques of propagation by**

**cuttings, grafting, budding, layering and its natural modifications, specialized**

**stems and roots; principles of tissue culture, biotechnology and micro propagation.**

### **Farm Machinery**

**Introduction ;Simple machines and their function; Methods for power transmission; Hydraulic system; Types of Farm Tractors and their uses;**

**Soil**

**preparation equipment for planting crops; Spraying and fertilizing equipment;**

**Harvesting equipment for seed and feed crops; Field capacity of a farm machine**

**and conditions for its selection.**



**(6) Design**  
**0601260 Principles of Landscape**

This module will cover an introduction to history and theories of landscape design, the principles of landscape design, Design analysis, site planning, vehicular and pedestrian circulation and the layout of architectural and horticultural elements.

**0601360 Xeriscaping**

This course is designed to expose students to the importance of water savings in arid and semiarid regions. This module will identify the principles of xeriscaping, familiarize students with mulches, irrigation choices, xeric designs and options for aesthetic inclusions into your xeric landscape.

**0601361 Hard Landscape  
Elements**

Develop an understanding of commonly used landscape construction materials, including stone, concrete and wood. Learn to incorporate design elements such as decks, patios, fences and walkways into the landscape, furniture, light and water elements will be covered.

**0601460  
Establishment and  
Management of Landscape  
sites**

Site management, analysis, design, and construction, including skill development in land topography, irrigation, drainage, and vegetative composition.

**Seminars, Research, Training, and Graduation Project**  
**0601492 Seminar in Landscaping and  
Floriculture**

Training of the student on collecting proper information on specific subject on Area of specialization from different sources, presentation and discussion.



### **0601493 Project on Design and Establishment of Landscape**

**Student must prepare graduation project under staff member's supervision. This project will be evaluated by staff committee in the department.**

### **0601496 Practice in Landscaping**

**Students will train on practices in landscaping at locations determined by the department**

### **0601499 Field Training in Horticulture and Crop Science**

**Training students to develop special skills in production of vegetables, fruit trees and ornamentals. Students will practice all agricultural practices in plant production.**

**(\* Minimum successful 95 credit hours.**

### **University elective courses**

#### **630100 Agriculture in Jordan**

**This course deals with the development and importance of agriculture in the world, Arab world and in Jordan. The course also covers the agricultural environment in Jordan, elements of production, plant production in dry land and irrigated areas, animal production, marketing of agricultural products, mechanization in agriculture, and finally the different organization dealing with agricultural activities in Jordan. Agricultural development plans and their effect on the agricultural sector in Jordan**



## **641100 Home Garden**

**This course outlines the importance of the home garden and its best utilization. It deals with the design and layout of the home garden to include summer and winter annual plants, bulbs, lawn, vegetable garden, and fruit trees. It covers knowledge of cultural practices such as pruning, propagation, fertilization and pest control, in addition to culturing and maintenance of indoor house plants.**