







## Course description form

1- Course name:

Evergreen fruit

2- Course code:

EVFR406

3- Fall semester

First semester, fall 2024-2025

4- The date this description was prepared

2024/9/1

**5**-Available attendance forms:

Presence + online

6- (Number of study hours (total) / number of units (total .

2 theoretical + 3 practical / 3.5

(Name of the course administrator (if more than one name is mentioned.

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Lecturer Dr. Badran Sabhan Abdullah Agha

Lecturer Dr. Ahmed Tarik AL-khyyat

Course objectives

: practical

Introducing students to the importance of -1 sustainable fruit trees

Through its economic and nutritional importance and its botanical description

In addition to the most important principles for dividing and classifying evergreen fruits in terms of .species, genera, and plant families

Study the most important factors affecting growth -2 and production, especially the environment .Evergreen fruit

Enable the student to increase some types of fruits -3 Evergreen by sexual or vegetative propagation

Enabling students to carry out breeding, pruning -4 and fertilization operations

:My theory

Introducing students to the most important types .1 of evergreen fruits that can be successfully .cultivated in Iraq

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Study the most important environmental .2 requirements necessary for the successful .cultivation of some types of evergreen fruits Enabling students to understand the most .3 important horticultural operations that must be carried out in the orchards of some types of .evergreen fruits

Teaching students about the most important .4 methods of reproduction of some types of evergreen .fruits and their most important origins and types 5. Introducing students to the most important types of each type of fruit studied, especially those that succeed under Iraqi conditions

.For some evergreen fruit trees

Teaching students the scientific foundations of -5 establishing orchards

Sustainable fruits plus how to make some

Service operations such as irrigation, fertilization and breeding

Thinning, pruning, harvesting and pest control.



## Teaching and learning strategies

- : practical
- .Live lectures with students -1
- .PowerPoint slides -2
- .Field visits to fruit orchards -3

Applying some practical skills in nursery and wooden -4

- ?canopy facilities
- .Dialogues and discussions with students -5
- Assigning tasks and reports

:My theory

.Live lectures with students -1

.PowerPoint slides -2

.Introduction pictures -3

.Audio recordings -4

.Dialogues and discussion -5

6- Assigning tasks and reports

## Course structure .1

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the we ek
Short exams, assignment s, discussions	Theoretical: Live lectures and PowerPoint slides Introduction pictures Live conversations and discussion: practical Assigning practical tasks and reports	:theoretical Palm: scientific name, distribution, economic importance, botanical description, climate, soil, propagation, methods of establishing an orchard, planting ,cuttings in the orchard :practical The economic importance of sustainable fruit trees, botanical description of sustainable fruit trees.	:theoretical The student masters the scientific name For palm trees and learns about the most important characteristics of palm trees Suitable environment and cultivation methods .Trees in the orchard :practical The student gets to know Economic importance For sustainable and mastered fruit trees Student on the parts of the tree Fully sustainable and important Every part.	Theor etical practical	.1
Short exams, assignment s, discussions	Theoretical: Live lectures and PowerPoint slides  Introduction pictures  Live conversations and discussion  : practical  Assigning practical tasks and reports	:theoretical Palm trees: pruning and breeding, irrigation, fertilization, flowering and pollination, the nature of fruit bearing, fruit thinning, harvesting, indications of fruit maturity, .varieties :practical First: Climate factors: temperature	:My theory The student masters all operations Horticultural service for orchards . Palm : practical  The student learns the most important Factors affecting growth And fruit tree production Evergreen.	Theor etical 3 practi cal	.2
Short exams, assignment s, discussions	Theoretical: Live lectures and PowerPoint slides Introduction pictures	:theoretical Olives: scientific name, distribution, economic importance, botanical description, climate, soil, propagation,	:theoretical The student learns about olives And tree specifications and the appropriate environment for it	2 Theor etical 3 practi cal	.3

				1	1
	Live conversations and discussion  : practical  Assigning practical tasks and reports	methods of establishing an olive grove, planting .seedlings in the orchard practical Second: Climate factors	And cultivation methods .Seedlings in the orchard :practical The student learns the most important Influencing climatic factors In the growth and fruiting of trees		
			the fruit.		
Short exams, assignment s, discussions	Theoretical: Live lectures and PowerPoint slides Introduction pictures Live conversations and discussion	:theoretical Olives: pruning and breeding, irrigation, fertilization, flowering and pollination, the nature of fruit bearing, fruit thinning, harvesting, indications	:My theory The student is aware of the nature of pregnancy Fruits and all processes Horticultural service for orchards .Olives : practical	2 Theor etical 3 practi cal	.4
	: practical  Assigning practical tasks and reports	of fruit maturity, .varieties :practical Light, air humidity and rain	The student recognizes the factors Influencing growth and production Fruit trees		
Short exams, assignment s, discussions	Theoretical: Live lectures and PowerPoint slides  Introduction pictures  Live conversations and discussion  : practical  Assigning practical tasks and reports	:theoretical Citrus: scientific name, distribution, economic importance, botanical description, climate, soil, propagation, methods of establishing a citrus orchard, planting .seedlings in the orchard :practical Ground humidity and wind	:theoretical The student knows the scientific names, types and genera of citrus fruits, and learns the most important characteristics of trees The appropriate environment is most important Origins and cultivation methods .Seedlings in the orchard :practical The student is familiar with the influencing factors In the growth and production of fruit trees	Theor etical 3 practi cal	.5
Short exams, assignment s, discussions	Theoretical: Live lectures and PowerPoint slides Introduction pictures Live conversations and discussion : practical Assigning practical tasks and reports	:theoretical Citrus: pruning and breeding, irrigation, fertilization, flowering and pollination, the nature of fruit bearing, fruit thinning, harvesting, indications of fruit maturity, .varieties and origins :practical The importance of soil for plants, soil salinity, soil fertility, soil aeration, soil moisture content, soil organisms, soil organic matter, soil toxicity, groundwater in the soil	:My theory The student gets to know Flowering trees and nature Bearing fruits and all operations Horticultural service for orchards . citrus fruits : practical The student gets to know the worker The second is environmental factors Influencing tree growth .Soil worker	2 Theor etical 3 practi cal	.6
Short exams, assignment s, discussions	Theoretical: Live lectures and PowerPoint slides Introduction pictures Live conversations and discussion: practical	:theoretical Banana: scientific name, distribution, economic importance, botanical description, climate, soil, propagation, methods for establishing a banana orchard, planting seedlings in the	:theoretical The student knows the scientific name For bananas and specifications Plant and its appropriate environment And cultivation methods .Seedlings in the orchard	2 Theor etical 3 practi cal	.7

Short exams, assignment s, discussions	Assigning practical tasks and reports  Theoretical: Live lectures and PowerPoint slides Introduction pictures Live conversations and discussion: practical Assigning practical tasks and reports	orchard, first monthly .exam :practical Banana species, their . importance and specifications :theoretical Bananas: pruning and breeding, irrigation, fertilization, flowering and pollination, the nature of fruit bearing, fruit thinning, harvesting, indications of fruit maturity, .varieties :practical Seedlings, seedlings,	:practical The student gets to know Types and genera of bananas  :My theory The student masters the nature of pregnancy Fruits and all processes Horticultural service for orchards . the banana  : practical The student is familiar with many ways .Banana fruit	2 Theor etical 3 practi cal	.8
Short exams, assignment s, discussions	Theoretical: Live lectures and PowerPoint slides Introduction pictures Live conversations and discussion : practical Assigning practical tasks and reports	and corms :theoretical Elenque Dunia: scientific name, distribution, economic importance, botanical description, climate, soil, propagation, methods for establishing the Elenque Dunia orchard, planting .seedlings in the orchard :practical The vegetative, root, flower and fruit total	:theoretical The student knows the scientific name And medical benefits Alenque fruit has a minimum and tree specifications The appropriate environment is most important Origins and cultivation methods .Seedlings in the orchard :practical The student gets to know Phenotypic description of the .fruit	Theor etical 3 practi ca!	.9
Short exams, assignment s, discussions	Theoretical: Live lectures and PowerPoint slides Introduction pictures Live conversations and discussion : practical Assigning practical tasks and reports	:theoretical Elenki Dunya: pruning and breeding, irrigation, fertilization, flowering and pollination, the nature of fruit bearing, fruit thinning, harvesting, indications of fruit maturity, .varieties :practical Planting seeds, conditions that must be met for germination, seed components. Methods of vegetative propagation	:My theory The student learns about Tazheer Trees and nature carry Fruits and all processes Horticultural service for orchards .Alenki world : practical The student learns the most important .Multiplication methods	2 Theor etical 3 practi cal	10
Short exams, assignm ents, discussio ns	Theoretical: Live lectures and PowerPoint slides Introduction pictures Live conversations and discussion : practical Assigning practical tasks and reports	:theoretical Mango: scientific name, distribution, economic importance, botanical description, climate, soil, propagation, methods of establishing an orchard, planting seedlings in the .orchard	:theoretical The student recognizes a fruit Mango and tree specifications The appropriate environment is most important Origins and cultivation methods Seedlings in the .orchard :practical	2 Theor etical 3 practi cal	

		:practical Sexual propagation and vegetative propagation, purposes of vegetative propagation, the importance of using vegetative propagation	The student is familiar with botanical description And the most important ways Multiplying mango .trees		
Short exams, assignment s, discussions	Theoretical: Live lectures and PowerPoint slides Introduction pictures Live conversations and discussion : practical Assigning practical tasks and reports	:theoretical Avocado: scientific name, distribution, economic importance, botanical description, climate, soil, propagation, methods of establishing an orchard, planting seedlings in the .orchard :practical Sexual propagation and vegetative propagation, purposes of vegetative propagation, the importance of using vegetative propagation	:theoretical The student recognizes a fruit Avocado and tree specifications The appropriate environment is most important Origins and cultivation methods .Seedlings in the orchard :practical The student is familiar with botanical description And the most important ways .Multiplying avocado trees	Theor etical 3 practi cal	
Short exams, assignment s, discussions	Theoretical: Live lectures and PowerPoint slides Introduction pictures Live conversations and discussion : practical Assigning practical tasks and reports	:theoretical Papaya: scientific name, distribution, economic importance, botanical description, climate, soil, propagation, methods of establishing an orchard, planting .seedlings in the orchard :practical Sexual propagation and vegetative propagation, purposes of vegetative propagation, the importance of using vegetative propagation	:theoretical The student recognizes a fruit Babaz and tree specifications The appropriate environment is most important Origins and cultivation methods .Seedlings in the orchard :practical The student is familiar with botanical description And the most important ways .Multiplying pawpaw trees	2 Theor etical 3 practi cal	
Short exams, assignment s, discussions	Theoretical: Live lectures and PowerPoint slides Introduction pictures Live conversations and discussion : practical Assigning practical tasks and reports	:theoretical Pineapple: scientific name, distribution, economic importance, botanical description, climate, soil, propagation, methods of establishing an orchard, planting seedlings in the .orchard :practical Sexual propagation and vegetative propagation, purposes of vegetative propagation, the importance of using vegetative propagation	:theoretical The student recognizes a fruit Pineapple and tree specifications The appropriate environment is most important Origins and cultivation methods .Seedlings in the orchard :practical The student is familiar with botanical description And the most important ways .Multiplying avocado trees	Theor etical 3 practi cal	
Short exams, assignment	Theoretical: Live lectures and PowerPoint slides	:theoretical Annona: scientific name, distribution, economic	:theoretical The student recognizes a fruit Anona and tree specifications	2 Theor etical	15

discussions L a :	ntroduction pictures Live conversations In discussion In practical In sassigning practical In sasks and reports	importance, botanical description, climate, soil, propagation, methods of establishing an orchard, planting .seedlings in the orchard :practical Sexual propagation and vegetative propagation, purposes of vegetative propagation, the importance of using vegetative propagation	The appropriate environment is most important Origins and cultivation methods .Seedlings in the orchard :practical The student is familiar with botanical description And the most important ways Increase the number of sour .cream trees	practi cal	
Course evaluat	•	vegetative propagation	:cream trees		

## Course evaluation

Relative	e weight %	Degree	Calendar date	Calendar methods	ت
			((week		
%	5	Theoretical: 3	Theoretical: 2-15	a . Daily oral exams	1
		Practical:- 2	Practical: 2 - 15		
%	10	Theoretical: 5	Theoretical: 2-15	B . Daily written exams	2
		Practical: 5	Practical: 2 - 15		
%	15	Theoretical: 10	Theoretical: 7-13	C. 2 semester exams during	3
		Practical: 15	Practical: 6 - 14	the semester for each	
%	10	Theoretical: 7	Theoretical: 15	Practical and theoretical	4
		Practical: 3	Practical: 15		
%	40	Theoretical: 40	Theoretical:	D . Assigning students to	5
%	20	Practical: 20	Practical:	prepare reports on topics	
% :	100	100		the study.	6

	Learning and teaching resources
Production of evergreen fruits / Dr. Jawad Thanoun Agha	Required textbooks (methodology, if any)
Prof. Dr. Ayad Hani Al-Allaf	Main references (sources)
Production of evergreen fruits / Makki Alwan	Recommended supporting books and references (scientific
	journals, reports)
Reports, bulletins and studies	Electronic references, Internet sites



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