




## 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) .	
Prof. Dr. Ayad Hani Ismail Al-Alaf	Email: <a href="mailto:Ayad_alalaf@uomosul.edu.iq">Ayad_alalaf@uomosul.edu.iq</a>
Lecturer Dr. Badran Sabhan Abdullah Agha	Email: <a href="mailto:Badran.sabhan@uomosul.edu.iq">Badran.sabhan@uomosul.edu.iq</a>
Lecturer Dr. Ahmed Tarik AL-khyyat	
Course objectives	
<p>: practical</p> <p>Introducing students to the importance of -1 sustainable fruit trees</p> <p>Through its economic and nutritional importance and its botanical description</p> <p>In addition to the most important principles for dividing and classifying evergreen fruits in terms of .species, genera, and plant families</p> <p>Study the most important factors affecting growth -2 and production, especially the environment</p> <p>.Evergreen fruit</p> <p>Enable the student to increase some types of fruits -3</p> <p>Evergreen by sexual or vegetative propagation</p> <p>.methods</p> <p>Enabling students to carry out breeding, pruning -4 and fertilization operations</p>	<p>:My theory</p> <p>Introducing students to the most important types .1 of evergreen fruits that can be successfully .cultivated in Iraq</p> <p>Study the most important environmental .2 requirements necessary for the successful .cultivation of some types of evergreen fruits</p> <p>Enabling students to understand the most .3 important horticultural operations that must be carried out in the orchards of some types of .evergreen fruits</p> <p>Teaching students about the most important .4 methods of reproduction of some types of evergreen .fruits and their most important origins and types</p> <p>5. Introducing students to the most important types of each type of fruit studied, especially those that succeed under Iraqi conditions</p>



.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.	
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## 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
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## Course structure .1

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Short exams, assignments, 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.	2 Theoretical 3 practical	.1
Short exams, assignments, 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.	2 Theoretical 3 practical	.2
Short exams, assignments, 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 Theoretical 3 practical	.3

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



	Assigning practical tasks and reports	orchard, first monthly .exam :practical Banana species, their importance and specifications	:practical The student gets to know Types and genera of bananas		
Short exams, assignments, discussions	Theoretical: Live lectures and PowerPoint slides Introduction pictures Live conversations and discussion : practical Assigning practical tasks and reports	: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, and corms	: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 Theoretical 3 practical	8.
Short exams, assignments, discussions	Theoretical: Live lectures and PowerPoint slides Introduction pictures Live conversations and discussion : practical Assigning practical tasks and reports	: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	2 Theoretical 3 practical	9.
Short exams, assignments, 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 Theoretical 3 practical	10.
Short exams, assignments, discussions	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 Theoretical 3 practical	11.



		: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, assignments, 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	2 Theoretical 3 practical	12 .
Short exams, assignments, 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 Theoretical 3 practical	13 .
Short exams, assignments, 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	2 Theoretical 3 practical	14 .
Short exams, assignments	Theoretical: Live lectures and PowerPoint slides	:theoretical Annona: scientific name, distribution, economic	:theoretical The student recognizes a fruit Anona and tree specifications	2 Theoretical	15 .



s, discussions	Introduction pictures Live conversations and discussion : practical Assigning practical tasks 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	3 practi cal	
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### Course evaluation

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

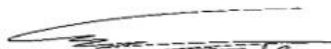




Practical subject teacher  
Lecturer Dr. Badran Sabhan Abdullah Agha  
Lecturer Dr. Ahmed Tarik AL-khyyat

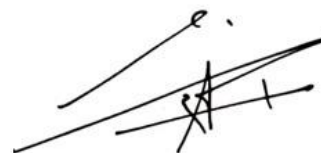


Theoretical subject teacher  
Prof. Dr. Ayad Hani Al-Allaf



Chairman of the Scientific Committee

Prof. Dr. Jassim Mohammed Alwan



Head of the department

Prof. Dr. Asmaa Muhammad Adel

