



Jordan University of Science and Technology
Faculty of Agriculture
Plant Production Department

PP722 Advanced Fruit Crops

First Semester 2020-2021

Course Catalog

3 Credit Hours. New directions in fruit production, tree training and pruning. Study of relationship between scion and graft. Light interception in orchards; dormancy in seeds and buds; fruit set, fruit growth and ripening; problems of replanting.

Text Book

Title	Modern Fruit Science
Author(s)	Childers, N, F., J. R. Morris, and G. S. Sibbett.
Edition	10th Edition
Short Name	Ref # 1
Other Information	

Instructor

Name	Dr. Nawaf Freihat
Office Location	M1L2
Office Hours	
Email	nfreihat@just.edu.jo

Class Schedule & Room

Section 1:
Lecture Time: Mon, Wed : 10:00 - 11:30
Room: منصة الكترونية

Tentative List of Topics Covered

Weeks	Topic	References
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Week 1	1 General plant environment 1	From Ref # 1
Week 2	Fruit classification	From Ref # 1
Week 3	3&4 Rootstock/Scion Relationship 2 Effects of rootstocks on the scion cultivars Effects of scion cultivar on rootstock	From Ref # 1
Week 4	High-Density Systems Canopy management	From Ref # 1
Week 5	Cultural Practices 2 Fertilization and nutrition Pruning	From Ref # 1
Week 6	8 Flowering 2	From Ref # 1
Week 7	Pollination and fruit set 2 Factors affecting pollination and fruit set Hormone relationships	From Ref # 1
Week 8	Growth and Fruit Thinning 2 11 Crop Maturity	From Ref # 1
Weeks 9, 10	Harvest/ Post-Harvest 2 Pre-harvest treatment Mechanical harvest Post-harvest physiology	From Ref # 1
Weeks 11, 12	13 Growth regulants 2	From Ref # 1
Weeks 13, 14	Dormancy and Plant Hardiness 2 Cold acclimation Freezing injury Hardiness Spring frost protection	From Ref # 1

Mapping of Course Outcomes to Program Student Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
The students are expected to know how to deal with the recent and current research findings for different fruit trees [10PLO1, 10PLO2, 5PLO3]	25%	Mid
to be able to apply all cultural practices needed by different kind of fruit trees. [15PLO3, 15PLO4]	30%	Mid
to perform different propagation methods and the relationship between scion and rootstocks. [10PLO4, 15PLO5, 5PLO6]	25%	Final
Application of research developments to modern fruit growing will be emphasized by the discussion of fundamental physiological- genetic mechanisms that influence plant growth and production. [10PLO6, 10PLO7]	20%	Final

Relationship to Program Student Outcomes (Out of 100%)						
PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7
10	10	20	23.33	12.50	14.17	10

Evaluation	
Assessment Tool	Weight
Mid	50%
Final	50%

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