



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Principles of Fruit Crops							
Course Code		BB211		Course Level		First Cycle (Bachelor's Degree)			
ECTS Credit	4	Workload	100 (<i>Hours</i>)	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		The aim of this course is to inform the students all subjects about fruit growing with using practicess beside the theorytical knowledge and training the students who can be able to use the knowledge in practically, and to be able to find the reasonable solutions, further techniques and strategies to problems.							
Course Content		In this lecture, content cover historical development of fruit science, economic importance, and classification of fruit trees, morphological and biological characters of root, stem, leaf, flower, fruit organs of fruit trees, climate and soil requirements. Generative and vegetative propagation methods and sapling production; orchard astablishments; annual cultivation techniques. (soil tillage,irrigation, fertilization, pruning, pest and disease protection, harvest and marketing).							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Case Study, Individual Study					
Name of Lecturer(s)		Lec. Gülsüm KARAKAYA, Prof. Halil Güner SEFEROĞLU							

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading

1	Özbek, S., 1977. Genel Meyvecilik. Ç. Ü. Ziraat Fak. Yayınları, No: 11, Adana.
2	Ağaoğlu, Y. S. ve ark., 2001. Genel Bahçe Bitkileri. Ankara Üniv. Ziraat Fak. Vakfı Yayınları No:4, Ankara.
3	Childers, N.F., 1983. Modern Fruit Science. Hort. Pub., 583p.
4	Westwood, M.N., 1978. Temperate Zone Pomology, 404 p.
5	Özçağır, R. Meyve Yetiştirme Tekniği. Ders teksiri.
6	Gülcan, R. Meyve yetiştirme İlkeleri. Ders teksiri.
7	Hartmann, H., Kester, E.D. and Davies, F., 1990. Plant Propagation. Principles and Practices. Rentice Hall Int. Inc., 647p.

Week	Weekly Detailed Course Contents	
1	Theoretical	The beginning of fruit growing in the world and their stages. Fruit production in the world and Turkey. The gene sources of important fruit species. The place and importance of fruit growing in economics of Turkey.
	Preparation Work	Orchard introduction.
2	Theoretical	The classification of fruit trees (botanical classification, classifications for fruit characters and climate requirements). Branch and bud structures of important fruit trees.
	Preparation Work	The examination of branch and bud structures of important fruit trees.
3	Theoretical	Morphological and biological characters of fruit trees: Root, stem, leaf structure and their functions.
	Preparation Work	The examination of branch, bud, leaf, flower structure of important fruit trees.
4	Theoretical	Morphological and biological characters of fruit trees: Flower structure and its functions. pollination and fertilization.
	Preparation Work	The examination of branch, bud, leaf, and flower structures of important fruit trees.
5	Theoretical	Morphological and biological characters of fruit trees: seed and fruit formation
	Preparation Work	The examination of branch, bud, leaf, flower and fruit structure of important fruit trees.
6	Theoretical	Ecological requirements of fruit trees: climate requirements
	Preparation Work	The examination of branch, bud, leaf, flower and fruit structure.
7	Theoretical	Ecological requirements of fruit trees: Climate requirements.
	Preparation Work	Poropagation of seeds of fruit trees: stratification and germination applications.



8	Preparation Work	Grafting methods of propagation of fruit trees : Budding.
	Intermediate Exam	Midterm exam
9	Theoretical	Propagation methods in fruit trees.
	Preparation Work	Grafting methods in fruit trees : Grafting.
10	Theoretical	Propagation of fruit trees. Generative (seed, sexual) propagation method.
	Preparation Work	Taking and preparation of cutting types in propagation of fruit trees with cuttings.
11	Theoretical	Propagation of fruit trees: Vegetative (asexual) propagation methods. layering and other propagation methods.
	Preparation Work	Mist propagation and rooting of the cuttings.
12	Theoretical	Fruit tree sapling production.
	Preparation Work	Fruit sapling planting.
13	Theoretical	The establishment of orchard.
	Preparation Work	Types of orchard establishments.
14	Theoretical	Annual cultivation techniques in orchards. soil tillage, irrigation, fertilization, pruning, pest and disease protection, harvest and marketing.
	Preparation Work	Pruning applications.
15	Theoretical	Collecting of term papers and their evaluations.
	Preparation Work	Practice exam.
16	Final Exam	Final exam.

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Lecture - Practice	14	1	2	42
Midterm Examination	1	7	1	8
Final Examination	1	7	1	8
Total Workload (Hours)				100
[Total Workload (Hours) / 25*] = ECTS				4

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	To be able to comprehend cultural history, general aspect, problems and economic importance of Fruit growing in Turkey and in the World
2	To be able to comprehend classification of fruit trees according to different characters.
3	To be able to define morphological and biological characters of fruit trees (in main organs).
4	To be able to recognize ecological (climate and soil) requirements in fruit trees.
5	To be able to comprehend propagation methods in fruit trees.
6	To be able to comprehend how sapling production make
7	To be able to comprehend establishment of orchard.
8	To be able to criticize annual cultural practices in fruit trees.
9	To be able to comprehend harvest, storage and marketing of fruits.

Programme Outcomes (Horticulture)

1	Ability to examine agricultural problems under the light of basic science, mathematics, and agriculture knowledge
2	Ability to plan and apply in different agricultural systems in horticultural crop plants
3	To constitute and realize breeding programmes according to market demands
4	Ability to propagate any kinds of stock materials in horticultural crop plants
5	Ability of transfer of modern technologies to production
6	Ability to have a consciousness of quality in production, storage, and evaluation in horticultural crop plants (To measure, evaluate, and manage different quality parameters)
7	To think analytically of protecting, providing transfer to future, and having responsibility to environment of all plant materials belong to horticultural crop plants area
8	Ability to search, think analytically, reach to knowledge, and obtain solution for solving of agricultural problems (Project, homework, thesis, summer training)
9	Ability to be aware of agricultural problems, to follow them, and to communicate own ideas of these subjects by verbal and written ways (Turkish, social course)
10	To be able to perform in a teamwork



11	Ability to work independently, give decision, and Express own thoughts by occupational-ethic values verbal and written ways in horticultural crop plants
12	Ability to think creatively, innovatively, and analytically, to comprehend the need of lifelong learning, be a part of a related subjects in a web of communication, and to develop by social means

Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

	L1	L2	L3	L4	L5	L6	L7	L8	L9
P1	5	5	5	5	5	5	5	5	4
P2	5	5	5	5	5	5	5	4	5
P3	5	5	5	5	5	5	5	4	5
P4	5	5	5	5	5	5	5	5	4
P5	5	5	5	5	5	5	5	5	5
P6	5	5	5	5	5	5	5	5	5
P7	5	5	5	5	5	5	5	5	5
P8	5	4	5	4	5	4	5	3	5
P9	5	4	4	5	5	4	5	3	4
P10	3	4	4	4	5	5	5	5	5
P11	5	5	5	5	5	5	5	5	5
P12	4	5	4	5	5	5	5	4	5

