



**AYDIN ADNAN MENDERES UNIVERSITY
SULTANHISAR VOCATIONAL SCHOOL
PLANT AND ANIMAL PRODUCTION
SEEDLING PRODUCTION
COURSE INFORMATION FORM**

Course Title	Horticultural Plant Physiology and Morphology								
Course Code	FY113			Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	4	Workload	100 (Hours)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	Have knowledge on physiological and morphological characteristics, growing, and biochemical occurrences in Fruits, Vegetables and Ornamentals								
Course Content	Physiological and Morphological information's such as Root, root metamorphosis, Hypocotil, Stem, stem metamorphosis, stem forms, Leaf, leaf metamorphosis, Leaf forms, Abcison, flower, Flower forms, Organs of flower, Leaf sections, Pollination, Pollination types, Fruits, fruit types, Seed, seed types, seed sections, Methabolizm phisyology, Chemical elements which build plants, osmosis, diffusion, water uptake, transpration, Photosynthesis, Chemosynthesis, Vegetative and Generative growing, Effective factors on plant growth (temperature, moisture, light, wind, soil, cultural applications, vitamins, carbonhydrates, proteins, oils, hormonoes, enzymes,) decision, shooting, apical dominancy, flowering, rooting, fertility, infertility, parthenocarp, apomycsiz, trophizym are given in this lesson								
Work Placement	Students have to complete their internship within the required time and properties. The required rules are describes at the Adnan Menderes University, Sultanhisar Vocational School, Student Internship Instructions.								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Individual Study								
Name of Lecturer(s)	Prof. Oğuz DOLGUN								

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading	
1	Course notes of Lecturers

Week	Weekly Detailed Course Contents	
1	Theoretical	Root, root metamorphoses, hypocotil
	Preparation Work	Course materials
2	Theoretical	Stem, stem metamorphoses
	Preparation Work	Course materials
3	Theoretical	Leaf, anatomical structure of leaf, parts of leaf
	Preparation Work	Course materials
4	Theoretical	Leaf metamorphoses, absision, flower, parts of flower
	Preparation Work	Course materials
5	Theoretical	Flower types, flower organs flower forms
	Preparation Work	Course materials
6	Theoretical	Fruit, Fruit classification, seed, parts of seed
	Preparation Work	Course materials
7	Theoretical	Elements in plant, puffing diffusion, ozmosis, permabilite
	Preparation Work	Course materials
8	Preparation Work	Course materials
	Intermediate Exam	Midterm
9	Theoretical	Water transfer , water loss, transpiration, gutation, asimilation, photosynthesis, kemosynthesis
	Preparation Work	Course materials
10	Theoretical	Growing, vegetative growing, generative growing, periyodicity Effective factors on plant growing, temperature, light, water, gases
	Preparation Work	Course materials
11	Theoretical	gravity, soil and cultural factors, vitamins, carbonhydrates, fats, nitrogenized compounds, hormonoes, enzymes
	Preparation Work	Course materials
12	Theoretical	Respite, germination, contination and rooting, apical dominancy



12	Preparation Work	Course materials
13	Theoretical	Flowering, sterility, parthenocarpy and apomixis, flowers and fruit loss
	Preparation Work	Course materials
14	Theoretical	Ageing, tropism,
	Preparation Work	Course materials
15	Theoretical	Vernalization and thermoperiodism
	Preparation Work	Course materials
16	Preparation Work	Course materials
	Final Exam	Final Term

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	3	42
Laboratory	4	9	0	36
Midterm Examination	1	8	1	9
Final Examination	1	12	1	13
Total Workload (Hours)				100
[Total Workload (Hours) / 25*] = ECTS				4

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Learning root structure and root
2	Learning stem structure and stem metamorphosis
3	Learning leaf structure and leaf metamorphosis
4	Learning flower structure and flower types
5	Learning fruit structure and fruit types
6	Learning seed structure and seed types
7	Having knowledge on morphological characteristics of plants
8	Having knowledge base metabolic occurrences in plants
9	Learning vegetative and generative growing
10	Having knowledge on endogenous and exogenous factors effected on plant life

Programme Outcomes (Seedling Production)

1	Having knowledge of physiology and morphology characteristics, growth, development and biochemical events occurred in fruits, vegetables and ornamentals plants
2	Having knowledge of soil, climate and irrigation conditions grown fruits, vegetables and ornamentals plants
3	Having knowledge of identification, classification and the use areas of fruits, vegetables and ornamentals plants
4	Having practical and theoretical knowledge of production techniques of fruits, vegetables and ornamentals plants
5	Having ability to identify and to maintain diseases and pests of fruits, vegetables and ornamentals plants
6	Having knowledge of marketing techniques, standards, contributions to the economy of fruits, vegetables and ornamentals plants, legal issues
7	Having knowledge of facilities and builds grown fruits, vegetables and ornamentals plants, and tools and materials used.
8	Having ability to use effective own language and having knowledge of language in order to communicate own colleagues and own customers,
9	Having knowledge of Atatürk Principle and Revolutions and, ability to assimilate Atatürk Principle and Revolutions
10	Having an enough foreign language to able to follow new development in relation with nursery production

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	L10
P1	5	5	5	5	5	5	5	5	5	5
P2									3	3
P3				4	4			3		3

