

# PLANT PHYSIOLOGY

1	Course Title:	PLANT PHYSIOLOGY
2	Course Code:	SBYZ214
3	Type of Course:	Compulsory
4	Level of Course:	Short Cycle
5	Year of Study:	1
6	Semester:	2
7	ECTS Credits Allocated:	3.00
8	Theoretical (hour/week):	2.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	0
11	Prerequisites:	-
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. Birol Taş
15	Course Lecturers:	-
16	Contact information of the Course Coordinator:	melik@uludag.edu.tr, 02242942352, U.Ü.Teknik Bilimler Meslek Yüksekokulu B Blok-Görükle Kampüsü/Bursa
17	Website:	
18	Objective of the Course:	To explain the physiological events in plant production and the effective factors on the development of these events such as water's transport to the plant, nutrient elements' transport from the soil and leaf to the root and stem, osmosis and diffusion, photosynthesis and respiration through chemical and physical events
19	Contribution of the Course to Professional Development:	
20	Learning Outcomes:	
	1	Learning the definition and importance of plant physiology and plant morphology
	2	Learning the structure of plant cell, tissue and organs
	3	Learning the plant vascular system and uptaking and transporting water and plant nutrient elements
	4	Learning the respiration and photosynthesis events in the frame of metabolism physiology
	5	Learning the knowledge about stress physiology in the plant
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21	Course Content:	
	Course Content:	
Week	Theoretical	Practice
1	The presentation of the course content and plant cell and the structure	

2	The structure and features of water, plasmolysis, osmosis			
3	Water in the soil water's utility, and distribution of it in plant roots and soil			
4	Uptaking water and transporting it in plant by xylem and the structure of xylem tissue			
5	Transpiration, features of stomas and gutasyon events			
6	Soil sowtion, absorption of ions by plants, transporting ions to the root domain, and absorption of nutrient elements by roots			
7	Absorption of nutrient elements and their transport through cell membranes			
8	Midterm exam and repeating courses			
9	Structure of floem tissue, and transporting organic compounds in plant by floem			
10	Definiation and importance of photosynthesis and pigments serving in photosynthesis			
11	Features of the light used in photosynthesis, prime reactions occurred in photosynthesis, light reactions in photosynthesis			
12	Midterm exam and repeating courses			
13	Darkness reactions and knowledge about the factors affecting photosynthesis			
14	Respiration in plants and its importance, aerobic respiration and the stages of it			
Activites		Number	Duration (hour)	Total Work Load (hour)
Theoretical		14	12.00	168.00
Practicals/Labs		0	0.00	0.00
Self study and preperation		14	1.00	14.00
Homeworks		0	0.00	0.00
Projects		0	0.00	0.00
Field Studies		0	0.00	0.00
TERM LEARNING ACTIVITIES		28	12.00	336.00
Others		0	0.00	0.00
Midterm Exam		1	6.00	6.00
Final Exams		0	0.00	0.00
Quiz		0	0.00	0.00
Total Work Load				72.00
Home work project		0	0.00	0.00
Total work load/ 30 hr		1	50.00	2.40
Final Exam		1	50.00	2.40
ECTS Credit of the Course				3.00
Total		3	100.00	
Contribution of Term (Year) Learning Activities to Success Grade		50.00		
Contribution of Final Exam to Success Grade		50.00		
Total		100.00		
Measurement and Evaluation Techniques Used in the Course				
24	ECTS / WORK LOAD TABLE			

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	2	0	4	5	0	0	3	0	0	0	0	0	0	0	0	0
ÖK2	2	0	4	5	0	0	3	0	0	0	0	0	0	0	0	0
ÖK3	2	0	4	5	0	0	3	0	0	0	0	0	0	0	0	0
ÖK4	2	0	4	5	0	0	3	0	0	0	0	0	0	0	0	0
ÖK5	2	0	4	5	0	0	3	0	0	0	0	0	0	0	0	0
LO: Learning Objectives    PQ: Program Qualifications																
Contribution Level:	1 very low			2 low			3 Medium			4 High			5 Very High			