AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Field Crop Physiology								
Course Code	ZTB505		Couse Level	Second Cycle (Master's Degree)					
ECTS Credit	8	Workload	200 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	Evaluation of principles of Plant Physiology for Field Crops, plant mechanism and physiological considerations.								
Course Content	Assimilation and photorespiration in C3 and C4 crops, differentiations, possible estimations in global climatic change, stress factors								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Experiment, Discussion, Case Study, Project Based Study, Individual Study, Problem Solving								
Name of Lecturer(s)	Prof. Aydın ÜNAY								

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

Recommended or Required Reading	
1	1. Taiz, L. And Zeiger, E. 1987. Plant Physiology. The Benjamin /Cummings Publishing Company, Inc.
2	2. Kacar, B., Katkat, V., Öztürk, Ş. 2002. Bitki Fizyolojisi. Vipaş AŞ Yayın No: 74. Bursa.
3	3. Avcıoğlu, R., Gürel, A. 2000. Bitki Fizyolojisi. EÜZF Ofset Basımevi. Ders Notları: 64/1.
4	4. Hay, R.K.M., Walker, A.J. 1995. An Introduction to The Physiology of Crop Yield

Week	Weekly Detailed Course Contents	
1	Theoretical	Plant Canopy and Leaf Area Characteristics
	Preparation Work	Literature review
2	Theoretical	Photosynthetic Efficiency: Photosynthesis and Photorespiration
3	Theoretical	C3 and C4 Photosynthesis
	Preparation Work	Term paper
4	Theoretical	Endogenous Factors in Photosynthesis
	Preparation Work	Presentation and discussion
5	Theoretical	Environmental Factors in Photosynthesis
	Preparation Work	Presentation and discussion
6	Theoretical	Water Stress
	Preparation Work	Demonstration-Remodelling
7	Theoretical	Water Use Efficiency
	Preparation Work	Demonstration-Remodelling
8	Theoretical	Nutrient Absorption
9	Intermediate Exam	Midterm exam
10	Theoretical	Transportation of Water and Nutrient
11	Theoretical	Dry Matter Analysis
	Preparation Work	Demonstration-Remodelling
12	Theoretical	Respiration
	Preparation Work	Presentation and discussion
13	Theoretical	Hormones
	Preparation Work	Presentation and discussion
14	Theoretical	Seconder Metabolites
	Preparation Work	Term paper
15	Theoretical	Stress Physiology
	Preparation Work	Term Project

16	Final Exam	Final exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	3	3	84
Assignment	2	13	20	66
Midterm Examination	1	0	10	10
Final Examination	1	10	30	40
			Total Workload (Hours)	200
			[Total Workload (Hours) / 25*] = **ECTS**	8
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	1. To be able to detail and develop the information İin the scope of field crop physiology
2	2. To be able to establish physiological relationships with field crops quality and yield
3	3. To be able to determine and develop ideas physiologically in complex problems
4	4. To be able to establish relationships between physiology and other discipline
5	5. To be able to monitor and transfer current developments in physiology

Programme Outcomes *(Plant Protection Master)*	
1	To develop knowledge and abilities that gained during undergraduate education
2	To gain ability to search and pursue current literature
3	To gain ability to plan and write projects that help solving problems in field of study.
4	To gain ability to conduct research, analyze data, evaluate research results scientifically and preapare reports and thesis writing.
5	Students will be able to learn and apply the laboratory test and analysis methods
6	To recognize occupational and ethical responsibility

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

	L1	L2	L3	L4	L5
P1	3	3	4	4	3
P2	4	4	3	3	4
P3	4	4	5	4	5
P4	4	4	5	4	5
P5	5	5	5	5	5
P6	4	4	4	4	5