



**AYDIN ADNAN MENDERES UNIVERSITY**  
**GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES**  
**FIELD CROPS**  
**FIELD CROPS**  
**FIELD CROPS MASTER**  
**COURSE INFORMATION FORM**

Course Title	Yield and Quality Characters of Legumes								
Course Code	ZTB541	Course Level		Second Cycle (Master's Degree)					
ECTS Credit	8	Workload	203 (Hours)	Theory	2	Practice	2	Laboratory	0
Objectives of the Course	Introducing of Legumes yield and quality characters, determining of the relationships between these characters and earn the ability of comment.								
Course Content	Discussing the planting area and production of the world and our country and evaluating the some observation about yield and quality characters.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Demonstration, Discussion								
Name of Lecturer(s)	Lec. Feride ÖNCAN SÜMER								

#### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

#### Recommended or Required Reading

1	AKÇIN A., Yemeklik Tane Baklagiller Ders Notları, Atatürk Üniv. Ziraat Fak. Yayınları, Erzurum, 1981.
2	ANLARSAL E., Yemeklik Tane Baklagiller Ders Notları, Çukurova Üniv. Ziraat Fak. Ders Notları, Adana.
3	AZKAN N., Yemeklik Tane Baklagiller Ders Notları, Uludağ Üniv. Ziraat Fak. Yayınları, Bursa.

Week	Weekly Detailed Course Contents	
1	Theoretical	Content and purpose of the lecture, the importance of Legumes in our country and the world
2	Theoretical	Morphological features of legumes
3	Theoretical	Morphological features of legumes
4	Theoretical	Different uses of legumes, their importance in sustainable and organic agriculture
5	Theoretical	Germination characteristics of legumes
6	Theoretical	Growth and development periods of legumes and their effects on yield and quality
7	Theoretical	Significant yield components in food legumes and their effects on product quality
8	Intermediate Exam	Midterm
9	Theoretical	Biological properties used to determine seed quality (germination rate and strength etc.)
10	Theoretical	Physical properties used in determining seed quality (purity, hectoliter, etc.)
11	Theoretical	Hydration properties of the seed (water intake, swelling etc.)
12	Theoretical	Protein and protein quality and effecting factors on legumes
13	Theoretical	Biotic and abiotic stress factors affecting the importance of fat and carbohydrates in legumes
14	Theoretical	Amino acids and their composition in food legumes and factors affecting it.
15	Theoretical	Agro-technical applications to improve the yield and quality of legumes
16	Final Exam	Final

#### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Lecture - Practice	14	0	2	28
Assignment	5	0	5	25
Term Project	2	0	30	60
Individual Work	5	0	10	50
Midterm Examination	1	2	4	6



Final Examination	1	2	4	6
	Total Workload (Hours)			203
	[Total Workload (Hours) / 25*] = ECTS			8
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	Gaining vision in the production and cultivation of legume
2	To measure and evaluate the factors related to yield and quality in legumes
3	Determine nutritional quality enhancing techniques
4	It contributes to the solution of problems related to yield and quality in legumes
5	Determines the necessary cultivation techniques in order to increase the yield in legumes

### Programme Outcomes (Field Crops Master)

1	To be able to improve and deepen the level of expertise in field crops on the basis of the departments licenses qualifications.
2	To be able to recognize the subjects related to field crops, to be able to solve these and make interpretation.
3	To be able to have the skills of acting independently, to have power to decide and to create.
4	To be able to work in teams between departments
5	To be able to give briefing about latest information of Field Crops in written, oral and visual ways.
6	To be able to take responsibility for developing the new approaches and to formulate a solution facing unforeseen complex situations of applications,
7	To be able to defend the original opinions in both Turkish and in foreign languages by using these languages and communicating effectively.
8	To be able to contribute to science by producing knowledge for the aim of improving quality, efficiency and sustainability
9	To be able to apply breeding methods in order to improve new varieties for Field Crops.
10	To be able to maintain and select the appropriate statistical methods within the framework of the study, evaluation of scientific ethics; to convert the results into a report/dissertation and to offer them by producing scientific publications.

### 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	5	5	5	5	5
P2	5	4	5	5	5
P3	5	5	5	5	5
P4	5	4	5	5	5
P5	4	5	5	5	5
P6	4	4	5	5	5
P7	4	5	5	5	5
P8	4	4	5	5	5
P9	4	5	5	5	5
P10	5	5	5	5	5

