



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

Course Title	Quality and Breeding of Cereals								
Course Code	ZTB503	Course Level		Second Cycle (Master's Degree)					
ECTS Credit	8	Workload	206 (Hours)	Theory	2	Practice	2	Laboratory	0
Objectives of the Course	Growing techniques, quality parameters and the analyses methods will introduce to characterize the product quality of cereals.								
Course Content	Identifying and enhancing the quality criteria for Grains								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Project Based Study, Individual Study								
Name of Lecturer(s)	Prof. Osman EREKUL								

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Diepenbrock, W., F. Ellmer, and J. Léon, 2005: Ackerbau, Pflanzenbau und Pflanzenzüchtung, Verlag Eugen Ulmer, Stuttgart, Germany.
2	Geisler, G., 1988: Ertragsphysiologie von Kulturarten des gemäßigten Klimas. Verlag Paul Parey, Berlin und Hamburg
3	Gooding, M. J., and W. P. Davies, 1997: Wheat Production and Utilization. CAB International, Wallingford, UK.

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction, importance of cereals quality
2	Theoretical	The effect of wheat production on product quality
3	Theoretical	Bread-making quality
4	Theoretical	Frequently used bread-making quality parameters
5	Theoretical	Analytical techniques
6	Theoretical	The effect of barley production on product quality
7	Theoretical	Feed and malting barley quality
8	Theoretical	Malting quality
9	Intermediate Exam	Midterm Exam
10	Theoretical	Frequently used brewing quality parameters
11	Theoretical	Analytical techniques
12	Theoretical	Effect of rye and triticale production on product quality
13	Theoretical	Feed and bread rye and triticale quality, parameters, analytical techniques
14	Theoretical	Presentation of assignments
15	Final Exam	Final

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	4	1	70
Lecture - Practice	14	7	1	112
Midterm Examination	1	8	1	9
Final Examination	1	14	1	15
Total Workload (Hours)				206
[Total Workload (Hours) / 25*] = ECTS				8

*25 hour workload is accepted as 1 ECTS



Learning Outcomes

1	1. To be able to identify bread making quality of wheat grain
2	2. To be able to comprehend grain quality to durum wheat
3	3. To be able to comprehend grain quality standard of barley
4	4. To be able to identify grain quality of rye, oats and triticale
5	Grain morphology, relationship between yield components and quality

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	4	4	5
P2	4	4	5	4	5
P3	3	4	3	4	5
P4	2	2	2	1	5
P5	1	2	2	2	5
P6	2	2	2	2	5
P7	3	2	3	1	5
P8	5	5	4	4	5
P9	5	5	5	5	5
P10	4	5	4	5	5

