AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Sustainable Agriculture								
Course Code	ZTB518		Couse Level	Second Cycle (Master's Degree)					
ECTS Credit	7	Workload	181 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	Agro-Technique use in Sustainable Agriculture for high yield and product quality in accordance with the safety of the environmental balance								
Course Content	Definition of sustainable agriculture, importance of sustainable agriculture for plants and soil, importance of nitrogen in field crops production, bacterial vaccination, bacterial-plant adaptation, nodule formation. The relationship between sustainable agriculture and plant yield is examined. The importance of crop rotation in sustainable agriculture, the benefits of legumes in crop rotation, tillage in sustainable agriculture, irrigation systems in sustainable agriculture and the effects of sustainable agriculture on soil and environment.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Project Based Study, Individual Study								
Name of Lecturer(s)	Assoc. Prof. Yakup Onur KOCA								

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

Recommended or Required Reading	
1	1. Sustainable Agriculture, Second Edition, J. Mason, 2003, 209 p
2	2. Ökologischer Landbau, Grundwissen für die Praxis, Herrmann a. Plakolm, 1991, 428 p.
3	3. Sürdürülebilir Tarım konusunda yapılmış yabancı dilde yayınlar

Week	Weekly Detailed Course Contents	
1	Theoretical	Characterization of sustainable agriculture, introduction and comparison with other agricultural systems
2	Theoretical	Sustainable consepts in agriculture
3	Theoretical	Fertilizition in sustainable agriculture
4	Theoretical	Crop rotation in sustainable agriculture
5	Theoretical	Soil tillage in sustainable agriculture
6	Theoretical	Irrigation in sustainable agriculture
7	Theoretical	Relations between soil fertility and sustainable agriculture
8	Intermediate Exam	Midterm exam
9	Theoretical	Developing of organic matter in sustainable agricultural systems
10	Theoretical	Managing plants , crops and pastures
11	Theoretical	Soil fertility - product physiology – yield and quality interrelationships
12	Theoretical	Improve of the yield of some culture plants in the frame of sustainable agriculure uses
13	Theoretical	Improve of the product quality of some culture plants in the frame of sustainable agriculture
14	Theoretical	Presentation of assignments
15	Final Exam	Final exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	7	3	140
Term Project	1	24	1	25
Midterm Examination	1	7	1	8

Final Examination	1	7	1	8
			Total Workload (Hours)	181
			[Total Workload (Hours) / 25*] = **ECTS**	7
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	1.To be able to comprehend the relationship between yield and soil in sustainable agriculture
2	2. To be able to comprehend the fertilization, irrigation, soil cultivation and crop rotation
3	3. To be able to improve productivity in sustainable agriculture
4	4. To be able to improve product quality in sustainable agriculture
5	Soil and plant relationship in sustainable agriculture

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