



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Preperation of Fertilization Program in Agriculture							
Course Code		ZTO530		Course Level		Second Cycle (Master's Degree)			
ECTS Credit	8	Workload	200 ( <i>Hours</i> )	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		To ensure that the students able to understand soil analysis report. Moreover they recognise the nutritional problems based on the reports. As a final, students will gain an experience to prepare soil fertilization programs.							
Course Content		Examine of analysis reports in terms of physical and chemical properties of soils. Investigation of analysis reports of soil nutrient contents. Such as nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, zinc, manganese, copper and the other nutrients. Preparation of fertilization program							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Case Study, Individual Study, Problem Solving					
Name of Lecturer(s)		Lec. Mustafa Ali KAPTAN							

### Assessment Methods and Criteria

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

### Recommended or Required Reading

1	Soil analysis report that prepared various laboratories
2	Kacar, B. ve A. V. Katkat. 1999. Gübreler ve Gübreleme Tekniği.
3	Tisdale, S.L., W.L. Nelson and J.D. Beaton. 1985. Soil Fertility and Fertilizers. Macmillan Publishing Company. USA.

Week	Weekly Detailed Course Contents	
1	Theoretical	Inspection of report with respect to nitrogen
	Preparation Work	Literature research
2	Theoretical	Inspection of report with respect to Phosphorus
	Preparation Work	Determination of homework
3	Theoretical	Inspection of report with respect to Potassium
	Preparation Work	Presentation and discussion
4	Theoretical	Inspection of report with respect to Ca, Mg, S
	Preparation Work	Presentation and discussion
5	Theoretical	Inspection of report with respect to Fe, Zn, Mn, Cu
	Preparation Work	Presentation and discussion
6	Theoretical	Inspection of report with respect to other micronutrients
	Preparation Work	Presentation and discussion
7	Theoretical	Inspection of report with respect to soil physical parameters
	Preparation Work	Presentation and discussion
8	Intermediate Exam	Midterm Exam
9	Theoretical	Inspection of report with respect to soil chemical parameters
	Preparation Work	Presentation and discussion
10	Theoretical	Inspection of report with respect to soil biological parameters and microbiological fertilizers
	Preparation Work	Presentation and discussion
11	Theoretical	Preparing fertilizer program
12	Theoretical	Preparing fertilizer program
13	Theoretical	Preparing fertilizer program
14	Theoretical	Preparing fertilizer program
15	Theoretical	General revision
16	Final Exam	Final Exam



**Workload Calculation**

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	3	42
Assignment	1	0	50	50
Term Project	1	0	50	50
Individual Work	1	0	14	14
Midterm Examination	1	0	14	14
Final Examination	1	0	30	30
Total Workload (Hours)				200
[Total Workload (Hours) / 25*] = <b>ECTS</b>				8

\*25 hour workload is accepted as 1 ECTS

**Learning Outcomes**

1	Students will be able to explain parameters presented in soil analysis report
2	Students will be able to recognize problems appear in the report
3	Students will be able to recognize assumptions needed to prepare soil fertilization program
4	Students will be able to fulfill requirements of effective fertilization
5	Students will be able to prepare the fertilization program

**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	2	2	3	2	2
P2	2	2	3	2	2
P3	2	2	3	2	2
P4	2	2	2	3	3
P5	2	2	2	3	3
P6	3	3	2	3	3
P7	3	3	2	3	3
P8	3	3	2	3	3
P9	3	3	2	2	3
P10	3	3	2	2	3

