AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Computer Application in Culturtechnique								
Course Code	ZTY522		Couse Level	Second Cycle (Master's Degree)					
ECTS Credit	8	Workload	200 *(Hours)*	Theory	2	Practice	2	Laboratory	0
Objectives of the Course	Introduction of computer programs used in culturtechnique, teaching the use and intreprete the outputs of the software								
Course Content	Softwares on irigation scheduling and management, interpretation of results, general structure of WINDOWS based programming languages, database formation and management on solving the irrigation and drainage problems, preparation of algorithms, interpretation of the outputs.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Experiment, Discussion, Project Based Study, Individual Study, Problem Solving								
Name of Lecturer(s)									

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

Recommended or Required Reading	
1	Sönmez, N. Balaban, A., Benli, E. Kültürteknik, AÜZF Yayınları, No: 911
2	Tülücü, K. 1997. Optimizasyon. ÇÜZF Yayınları. No: 189
3	Crop evapotranspiration; Guidelines for computing crop water requirements. Irrigation and Drainage Paper No. 56

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction of computer programs used in culturtechnique
2	Theoretical	Criteria in selecting the proper software
3	Theoretical	Software used in irrigation scheduling and management
4	Theoretical	Climwat, CROPWAT software
5	Theoretical	IRSIS, AQUACROP software
6	Theoretical	General structure of Windows based programs
7	Theoretical	Database formation in irrigation and drainage problems
8	Theoretical	Using the available database in irrigation and drainage problem solution
9	Intermediate Exam	Mid Term Exam
10	Theoretical	Algorithms preparation in solving problems
11	Theoretical	Introduction to land leveling programs and basic criteria
12	Theoretical	Land leveling projects and application
13	Theoretical	Computer applications in production structures and the structure of current software for automation
14	Theoretical	Automation in agricultural production structures
15	Theoretical	General Review
16	Final Exam	Final Exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	5	2	98
Lecture - Practice	14	4	2	84
Midterm Examination	1	6	2	8
Final Examination	1	8	2	10
			Total Workload (Hours)	200
			[Total Workload (Hours) / 25*] = **ECTS**	8
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	The ability to use and interpret the software on irrigation management
2	The ability to use irrigation management software on field and basin scale
3	The ability to use and interpret the outputs of software on farm structures design
4	The ability to use and interpret the outputs of software on land consolidation
5	The ability to use and interpret some specific software

Programme Outcomes *(Agricultural Structures and Irrigation Master)*	
1	Ability to use, evaluate and improve the knowledge gained from field of study at an expert level
2	Ability to reach necessary the knowledge
3	To able to conduct scientific studies (research) related to the field
4	Ability to consider academical and ethical values the studies
5	Ability to improve editing method and evaluate the results of researches
6	The studies, the ability to reach result and application, develop new approaches
7	A topic in the field of written, verbally and visually as the ability to express
8	Effective use of Turkish language and ability to communicate in a foreign language both written and verbal

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	5	5	5	5
P3	5	5	5	5	5
P4	5	5	5	5	5
P5	5	5	5	5	5
P6	5	5	5	5	5
P7	5	5	5	5	5
P8	5	5	5	5	5