AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Irrigation and Drainage								
Course Code	BSM211		Couse Level	First Cycle (Bachelor's Degree)					
ECTS Credit	4	Workload	102 *(Hours)*	Theory	2	Practice	2	Laboratory	0
Objectives of the Course	The aim of this course is to teach irrigation, soil-water-climate relationship, irrigation management and irrigation methods								
Course Content	Definiton and importance of irrigation, benefits of irrigation, history of irrigation, the physical properties of soil, infiltration, crop coefficient, evapotranspiration, irrigation scheduling, agricultural drainage								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Project Based Study, Individual Study, Problem Solving								
Name of Lecturer(s)	Prof. Ercan YEŞİLIRMAK, Prof. Fuat SEZGİN, Prof. Necdet DAĞDELEN, Prof. Selin Muradiye AKÇAY								

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading	
1	Güngör, Y., Erözel, A.Z., Yıldırım O., 2004. Sulama, Ankara Üniversitesi Ziraat Fakültesi Tarımsal Yapılar ve Sulama Bölümü, Yayın No: 1540, Ders Kitabı: 493, Ankara

Week	Weekly Detailed Course Contents	
1	Theoretical	The definition and importance of irrigation
2	Theoretical	the benefits of irrigation, irrigation history
3	Theoretical	Soil-water-plant-atmosphere relationships
4	Theoretical	Climate and soil factors
5	Theoretical	Soil moisture
6	Theoretical	Infiltration
7	Theoretical	the capacity of the irrigation water requirements and irrigation system
8	Theoretical	the capacity of the irrigation water requirements and irrigation system
9	Theoretical	Irrigation methods
10	Theoretical	selection of appropriate irrigation methods
11	Theoretical	Surface irrigation methods
12	Theoretical	Pressured irrigation methods
13	Theoretical	The definition and importance of drainage, drainage etudes
14	Theoretical	Drainage methods, surface drainage methods
15	Theoretical	Subdrainage methods
16	Final Exam	Final Exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Lecture - Practice	14	1	2	42
Practice Examination	1	1	1	2
Midterm Examination	1	7	1	8
Final Examination	1	7	1	8
			Total Workload (Hours)	102
			[Total Workload (Hours) / 25*] = **ECTS**	4
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	To identify the irrigation and basic concepts related to irrigation
2	To understand the relationship between soil-water-plant-atmosphere
3	Being able to understand the information about irrigation methods
4	Basic concepts of drainage and drainage etudes
5	To describe drainage methods

Programme Outcomes *(Agricultural Biotechnology)*	
1	To be able to develop skills in identifying, modeling and solving problems in agricultural biotechnology
2	To be able to synthesize life and engineering sciences for the effective resource planning of agricultural biotechnology applications
3	To be able to interpret about living organisms structure, metabolic and physiological processes in order to propose biotechnological solutions to the agricultural problems
4	To be able to analyze genomic, metabolomic and proteomic information via bioinformatic tools.
5	To have the ability to analyze collected data and interpret the results.
6	To have the ability of individual working ability and to make independent decisions, to work in inter-disciplinary and interdisciplinary teamwork, to communicate by expressing their ideas orally and in writing, clearly and concisely
7	To have the awareness of professional liabilities and ethics
8	To be able to follow current national and international problems

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	3	2	3	2
P2	2	2	4	4	4
P3	1	1	1	1	1
P4	1	1	1	1	1
P5	3	3	2	2	2
P6	3	3	2	2	2
P7	3	3	2	2	2
P8	3	2	2	2	2