



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Agricultural Ecology							
Course Code		TB108		Course Level		First Cycle (Bachelor's Degree)			
ECTS Credit	3	Workload	75 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		Understanding of natural and agricultural ecosystems with the system and the ecosystem, learning in effective environmental factors and alternative production systems on agricultural ecosystems							
Course Content		The definition and development of ecology as a science, system, model and the bounding basic concepts, ecosystem structure and function, ecosystem energy flow and chemical matter cycles, agricultural ecosystems, light and temperature characteristics and the effect on plants, characteristics of the atmosphere and importance of the agricultural aspects, air movements, effect on plants of water and its of different states, soil and soil characteristics, biological factors, conventional and alternative farming systems, environmental problems caused by agriculture, sustainability.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation)					
Name of Lecturer(s)		Prof. Mustafa SÜRMEN, Prof. Olcay ARABACI, Prof. Osman EREKUL							

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading

1	Turgut, İ., 2006. Tarımsal Ekoloji, ADÜ Yayınları No:12
2	Boşgelmez, A., Boşgelmez, İ.İ., Savaşçı, S., Paslı, N., Kaynaş, S., 2000. Ekoloji I, ISVAK Yayın No: 6
3	Boşgelmez, A., Boşgelmez, İ.İ., Savaşçı, S., Paslı, N., Kaynaş, S., 2000. Ekoloji II-Toprak, ISVAK Yayın No: 6
4	4. Farklı Kaynaklardan Derlenmiş Sunumlar ve Ders Notları Internet Kaynakları

Week	Weekly Detailed Course Contents	
1	Theoretical	The importance of environment, definition of ecology, natural resources
2	Theoretical	Systems models and limiting factors influence laws
3	Theoretical	Ecosystem, ecosystems and functions of the items
4	Theoretical	Ecosystem energy, photosynthesis
5	Theoretical	Primary and secondary production in ecosystem and flow of energy
6	Theoretical	Chemical cycles in ecosystems
7	Theoretical	Agricultural ecosystems
8	Intermediate Exam	Midterm exam
9	Theoretical	Environmental conditions in agricultural ecosystems, climatic factors, light
10	Theoretical	Temperature, the factors of affecting changes in temperature, thermoperiodism
11	Theoretical	The atmosphere, layers of atmosphere, composition of the atmosphere, the importance of the agricultural aspect
12	Theoretical	Water, air humidity, air humidity importance to plants, rainfall
13	Theoretical	Soil factors, soil texture, structure, plant nutrient elements, Biological Factors
14	Theoretical	Traditional and alternative farming systems
15	Theoretical	Environmental problems caused by agriculture, sustainability
16	Theoretical	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	1	28
Lecture - Practice	14	1	1	28
Midterm Examination	1	5	1	6



Final Examination	1	12	1	13
Total Workload (Hours)				75
[Total Workload (Hours) / 25*] = ECTS				3
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	To understand the importance of environment and natural resources
2	To learn the principles of sustainability in natural and agricultural ecosystems
3	Acquiring informations about the environmental conditions of agricultural ecosystems
4	To compare conventional and alternative farming systems
5	. Finding solutions to environmental problems caused by agriculture

Programme Outcomes (Horticulture)

1	Ability to examine agricultural problems under the light of basic science, mathematics, and agriculture knowledge
2	Ability to plan and apply in different agricultural systems in horticultural crop plants
3	To constitute and realize breeding programmes according to market demands
4	Ability to propagate any kinds of stock materials in horticultural crop plants
5	Ability of transfer of modern technologies to production
6	Ability to have a consciousness of quality in production, storage, and evaluation in horticultural crop plants (To measure, evaluate, and manage different quality parameters)
7	To think analytically of protecting, providing transfer to future, and having responsibility to environment of all plant materials belong to horticultural crop plants area
8	Ability to search, think analytically, reach to knowledge, and obtain solution for solving of agricultural problems (Project, homework, thesis, summer training)
9	Ability to be aware of agricultural problems, to follow them, and to communicate own ideas of these subjects by verbal and written ways (Turkish, social course)
10	To be able to perform in a teamwork
11	Ability to work independently, give decision, and Express own thoughts by occupational-ethic values verbal and written ways in horticultural crop plants
12	Ability to think creatively, innovatively, and analytically, to comprehend the need of lifelong learning, be a part of a related subjects in a web of communication, and to develop by social means

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
P7	5	5	5	5	5

