



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Agricultural Ecology							
Course Code		BKR101		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	3	Workload	75 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		Understanding the ecological factors at global level constituting of natural and agricultural ecosystems, and to figure out the planning of basic agricultural activities in terms of sustainability.							
Course Content		Ecological definitions and terms, natural and agricultural ecosystems, relationship between climate and agriculture, relationship between soil and agriculture, soil productivity and microorganisms, biotic and abiotic stress factors, global climatic change, environmental problems, Photosynthesis, transpiration, water use efficiency, drought, conventional and alternative farming systems, pollution, sustainability, erosion.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Case Study, Individual Study, Problem Solving					
Name of Lecturer(s)									

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Instructor Lecture Notes
2	Presentations and Lecture Notes Compiled From Different Sources
3	T.R. Sinclair, 1998. Principles Of Ecology In Plant Production
4	D. J. Gibson, 2002. Methods In Comparative Plant Population Ecology

Week	Weekly Detailed Course Contents	
1	Theoretical	Ecological definitions and terms
2	Theoretical	Ecological definitions and terms
3	Theoretical	Natural and agricultural ecosystems
4	Theoretical	Biotic and abiotic stress factors
5	Theoretical	Agriculture-climate relations, climate groups
6	Theoretical	Global climatic change, environmental problems and pollution
7	Theoretical	Effects of temperature and light on agriculture
8	Intermediate Exam	Exam
9	Theoretical	Precipitation and drought
10	Theoretical	Agriculture-soil relations and soil factors
11	Theoretical	Soil productivity and erosion
12	Theoretical	Photosynthesis, transpiration, water use efficiency
13	Theoretical	Respiration
14	Theoretical	Conventional and alternative farming systems
15	Theoretical	Conventional and alternative farming systems

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Assignment	1	13	0	13
Midterm Examination	1	9	1	10



Final Examination	1	9	1	10
Total Workload (Hours)				75
[Total Workload (Hours) / 25*] = ECTS				3
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	Be able to; understanding the ecological definitions and developing the ability of establishing interrelations between the ecological factors
2	Ability of interpretation of natural and agricultural ecosystems
3	Comparison of conventional and alternative agricultural systems
4	Capability of discussing the possible effects of global climate change on agricultural activities
5	Evaluation and interpretation of biotic and abiotic environmental factors
6	Understanding of, and solving the problems of agricultural production related to ecological factors

Programme Outcomes (Plant Protection)

1	To be able to learn about systematics, morphological, biological, ecological and epidemiological information about diseases, pests and weeds that cause the loss of the crop at every stage of production,
2	To be able to become familiar with agricultural management control methods and their use in control of plant diseases, pests and weeds in cultivated agricultural crops,
3	To be able to diagnose and identify plant diseases, insect, mite or nematode pests or weeds that cause economical losses in stored crops and products,
4	To be able to use pesticides safely and effectively and informed about their hazardous non-target effects on the environment and human health.
5	To be able to learn plant protection products and their practice in organic agriculture,
6	To be able to evaluate the information obtained throughout the learning process with cause-effect relations, to be able to collect data and transfer the results to practice, and to predict where, when and why to use the information
7	To be able to comply with professional, cultural, social ethic rules in his / her field and to be entrepreneurial
8	To be able to have conscious of the universality of social rights, social justice, quality and cultural values, environment protection, occupational health and safety issues
9	To be able to use information and communication technologies together with the required computer software of his / her field
10	To be able to have the necessary background and qualifications to work in public and private agriculture sectors, to be able to conduct a study independently / as a team member and to be able to comply with the relevant legislation

Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

	L1	L2	L3	L4	L5	L6
P1	3	3	3	4	3	3
P2	3	3	3	4	3	3
P3	3	3	3	3	2	3
P4	3	3	3	3	3	3
P5	3	3	3	3	4	3
P6	3	3	3	3	4	3
P7	1	2	1	1	2	3
P10	3	3	4	4	3	3

