



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Pesticides and Analysis							
Course Code		LBT218		Couese Level		Short Cycle (Associate's Degree)			
ECTS Credit	4	Workload	101 (<i>Hours</i>)	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		Tour of horticulture and garden products pests, their loss will be explained. In addition, sustainable fight against these pests will be discussed.							
Course Content		The definition of pesticides, the history of using pesticides, the benefit-damage of pesticides, the classification of pesticides, organic chlorinated pesticides, carbamate pesticides, the groups of pyrethroid pesticides, the formulations of pesticides, the history of food residue analysis, legislation of pesticides.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Demonstration, Discussion, Individual Study					
Name of Lecturer(s)		Ins. Burcu KESER, Lec. Fulya KAYA APAK							

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Toros S., Maden S., Sözeri S. 2001. Tarımsal Savaşım ve Yöntem ve İlaçları Ankara Üniversitesi Ziraat Fakültesi Ders Kitabı (IV. Baskı)
2	Tarım İlaçlarının Etkin ve Güvenilir Kullanımı El Kitabı TİSİT Yayınları.
3	Öztürk, S., 1990. Tarım İlaçları. Hasad Yayıncılık, Ankara, 523.
4	Öncüler, 2008. Tarımsal Zararlılarla Savaş Yöntemleri ve İlaç. ADÜ Yayınları.
5	Fong, W.G., H.A., Moye, J.N. Seiber and J.P., Toth, 1999. "Pesticide Residues in Foods: Methods, Techniques, and Regulations" Wiley-Interscience, 376 pp.

Week	Weekly Detailed Course Contents	
1	Theoretical	The definition of pesticides, the history of using pesticides
	Practice	To examine of pesticides boxes
	Preparation Work	Preparing material which about topic
2	Theoretical	the benefit-damage of pesticides
	Practice	To examine of pesticides application and results
	Preparation Work	Preparing material which about topic
3	Theoretical	The classification of pesticides
	Practice	To examine of pesticidesboxes
	Preparation Work	Preparing material which about topic
4	Theoretical	the formulations of pesticides
	Practice	To examine of pesticides boxes
	Preparation Work	Preparing material which about topic
5	Theoretical	the history of food residue analysis
	Practice	To examine of food analysis equipments
	Preparation Work	Preparing material which about topic
6	Theoretical	The pesticides residue analysis methods
	Practice	To examine of pesticides residue analysis methods
	Preparation Work	Preparing material which about topic
7	Theoretical	Sampling from vegetables and foods for residue analysis
	Practice	To examine of Sampling from vegetables and foods
	Preparation Work	Preparing material which about topic
8	Intermediate Exam	Mid-term Exam
9	Theoretical	Sampling from soil and water for residue analysis
	Practice	To examine of Sampling from soil and water



9	Preparation Work	Preparing material which about topic
10	Theoretical	Instruments used for pesticide analysis
	Practice	To examine of pesticides analysis instruments
	Preparation Work	Preparing material which about topic
11	Theoretical	Instruments used for pesticide analysis
	Practice	To examine of pesticides analysis instruments
	Preparation Work	Preparing material which about topic
12	Theoretical	Evaluation of the results from pesticide analyses
	Practice	To determination of results
	Preparation Work	Preparing material which about topic
13	Theoretical	To determination of results
	Practice	To determination of results
	Preparation Work	Preparing material which about topic
14	Theoretical	legislation of pesticides
	Practice	To examine of legislation of pesticides
	Preparation Work	Preparing material which about topic
15	Theoretical	legislation of pesticides
	Practice	To examine of legislation of pesticides
	Preparation Work	Preparing material which about topic
16	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Lecture - Practice	14	0	2	28
Individual Work	14	2	0	28
Midterm Examination	1	5	1	6
Final Examination	1	10	1	11
Total Workload (Hours)				101
[Total Workload (Hours) / 25*] = ECTS				4

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Get to know about basic and special terms related to chromatographic pesticide analyses, deepening and improving the current and advanced information about the subjects leading to original ideas and searching as the excellence level
2	Manipulate the practices on sampling and extraction, etc.
3	Evaluate for pesticide analyze results
4	To be having information about legislation of pesticides
5	To be able to comprehend the formulations of pesticides

Programme Outcomes (Laboratory Technology)

1	To be able to comprehend social, cultural and social responsibilities, to be able to follow national and international contemporary problems and developments
2	Atatürk is bound to Atatürk nationalism in the direction of principles and reforms; Adopting the national, moral, spiritual and cultural values of the Turkish people, open to universal and contemporary developments, the Turkish language is a rich, rooted and productive language; Have a love of language and a consciousness; To have the ability to use as much of a foreign language as he would need to read, taste and habit and professionally.
3	To be able to recognize the basic hardware units and operating systems of a computer, having information about internet usage and preparing documents, spreadsheets and presentations on computer by using office programs.
4	Acquires theoretical and practical knowledge at the basic level in mathematics, science and vocational field.
5	With the knowledge of laboratory technology in the field, he knows and analyzes problems, brings interpretation of data and suggests solutions.
6	In laboratories, according to the prepared business plan and program, necessary work can be done to obtain the desired quality products.
7	To have professional and ethical responsibility in business life.
8	Development and change are open, follow scientific social and cultural innovations, and develop themselves constantly.



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

	L1	L2	L3	L4
P1	5	5	5	5
P2	1	1	1	1
P3	1	1	1	1
P4	4	4	4	4
P5	5	4	5	4
P6	5	5	5	5
P7	5	5	5	5
P8	4	4	4	4

