AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Diagnosis of Stored Product Diseases and Pests By Molecular Genetic Methods								
Course Code	LBT206		Couse Level	Short Cycle (Associate's Degree)					
ECTS Credit	3	Workload	75 *(Hours)*	Theory	2	Practice	2	Laboratory	0
Objectives of the Course	Diseases, insect, mite, nematodes pests management in store houses								
Course Content	Types of store houses and spesifications, storage conditions, Rodents , mites and nematodes in store houses and their control. Diseases and insects in stores. Cocharaches and their control, Coleopteran and Lepidopteran pests in storage and their control. Integrated pest management in stores. Cultural and mechanical control. Physical, Legislative control, Biological and biotechnological control. Chemical control.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Demonstration, Discussion, Individual Study								
Name of Lecturer(s)									

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

Recommended or Required Reading	
1	Yıldırım, E., Özbek, H. ve Aslan, İ., 2001. Depolanmış Ürün Zararlıları.
2	R. Barkai-Golan and Paster, N., 2008. Mycotoxins in Fruits and Vegetables. Academic Press is an imprint of Elsevier
3	Agrios, G. 2005. Plant Pathology, 5. Edition Elsevier Academic Press
4	R. Barkai-Golan 2001. Postharvest Diseases of Fruits and Vegetables, Development and Control. Academic Press is an imprint of Elsevier.
5	K.G. Mukerjı, K.G., 2004 Disease Management of Fruits and Vegetables, Kluwer Academıc Publıshers

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction, factors affecting postharvest spoilage
	Practice	To examine of stored products samples.
	Preparation Work	Preparing material which about topic.
2	Theoretical	Postharvest diseases of citrus and pome fruits, control methods and economic importance.
	Practice	To examine of citrus and pome fruits samples.
	Preparation Work	Preparing material which about topic.
3	Theoretical	Postharvest diseases of berry fruits and stone fruits, control methods and economic importance.
	Practice	To examine of berry fruits and stone fruits samples.
	Preparation Work	Preparing material which about topic.
4	Theoretical	Postharvest diseases of potato, carrot and cereals, control methods and economic importance.
	Practice	To examine of cereals samples.
	Preparation Work	Preparing material which about topic.
5	Theoretical	Postharvest diseases of nuts, control methods and economic importance.
	Practice	To examine of nuts samples.
	Preparation Work	Preparing material which about topic.
6	Theoretical	Diseases and physiological disorders which are associated with the nutrients and effect of environmental factors
	Practice	To examine of fruits end vegetables samples.
	Preparation Work	Preparing material which about topic.
7	Theoretical	Mycotoxins and effects on consumers
	Practice	To examine of fruits end vegetables samples.
	Preparation Work	Preparing material which about topic.
8	Intermediate Exam	Mid-term Exam
9	Theoretical	Pests of dried fruit products, description of injuries, biology of the pests, examination of the injuries

9	Practice	To examine of dried products samples.
	Preparation Work	Preparing material which about topic.
10	Theoretical	Pests of stored cereals, Introduction to Coleoptera and Lepidoptera, their biology, control and problems in Turkey
	Practice	To examine of cereals samples.
	Preparation Work	Preparing material which about topic.
11	Theoretical	Mites of stored cereals, their identification, biology and control
	Practice	To examine of cereals samples.
	Preparation Work	Preparing material which about topic.
12	Theoretical	Pests of stored nuts, their identification, biology and control
	Practice	To examine of stored nuts samples.
	Preparation Work	Preparing material which about topic.
13	Theoretical	Pests of stored tobacco and potato, idenfication, biology and control
	Practice	To examine of stored tobacco and potato samples.
	Preparation Work	Preparing material which about topic.
14	Theoretical	Control methods for stored pests, cultural control, physical control, chemical control, biological control, biothechnical control
	Practice	To examine of stored pests samples.
	Preparation Work	Preparing material which about topic.
15	Theoretical	Control methods of stored pests II; manipulating of storage conditions, fumigation, integrated management stratejies
	Practice	To examine of stored pests samples.
	Preparation Work	Preparing material which about topic.
16	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	1	14
Lecture - Practice	14	0	1	14
Assignment	14	1	0	14
Midterm Examination	1	10	1	11
Final Examination	1	20	2	22
			Total Workload (Hours)	75
			[Total Workload (Hours) / 25*] = **ECTS**	3

**25 hour workload is accepted as 1 ECTS*

Learning Outcomes

1	To be able to describe optimum storage conditions of crops
2	To be able to identify postharvest fungal and bacterial diseases and pest on storage crops
3	To be able to recognize physiological disorders on stored crops
4	To be able to name the control measurements of postharvest diseases and pests
5	Introduction, factors affecting post-harvest spoilage

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	4	4	4	4
P2	2	2	2	2
P3	1	1	1	1
P4	4	4	4	4
P5	5	5	5	5
P6	4	4	4	4
P7	4	4	4	4
P8	5	5	5	5