



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Warehouse Sickness and Pests							
Course Code		BKR106		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	3	Workload	75 (Hours)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		To describe insect species which are harmful on stored products and to learn control methods with these pests. Teaching the plant diseases in storage and packing house and their control methods.							
Course Content		Symptoms, diagnosis and control methods of plant diseases in the storage and packing house. The importance of postharvest diseases, from pre-harvest storage diseases, post-harvest storage diseases borne, diseases, struggle warehouse. The importance of pests in stored products, biology, and damage types. Loss for the product, they must be applied according to the type of stored product pest control methods in classification will be discussed.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Case Study, Individual Study, Problem Solving					
Name of Lecturer(s)		Prof. Özgür GÜÇLÜ							

### Assessment Methods and Criteria

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

### Recommended or Required Reading

1	Course notes of Lecturers
2	Presentations and Lecture Notes Compiled From Different Sources
3	Depolanmış ürün Zararlıları (Prof. Dr Erol YILDIRIM, Prof. Dr. Hikmet ÖZBEK, Prof. Dr. İrfan ARSLAN).
4	Zirai Mücadele Teknik Talimatları (Dr. Mete AYDEMİR)

Week	Weekly Detailed Course Contents	
1	Theoretical	General information about postharvest pathogens and abiotic disease factors
2	Theoretical	Economic importance of postharvest diseases
3	Theoretical	Origin of the postharvest diseases and germination of spores
4	Theoretical	Host-Pathogens interactions in postharvest stage
5	Theoretical	Factors affecting the development of the postharvest diseases
6	Theoretical	Mechanism of postharvest pathogens attack
7	Theoretical	Host resistance against to postharvest diseases
8	Theoretical	Introduction, general information about the stored product pests, cockroaches Thysanura species and related issues are discussed.
9	Theoretical	Book bits, Ekin Black beetle, Leather insects examined. Carpet beetles, beetle crop land, crop Humpback bit, Cigarette beetle pests are discussed.
10	Theoretical	Bread beetle, insect Blade, Red, Small Gravel bits, flour ayrıntılanır established pests.
11	Theoretical	Crushing bits, bits of flour, horned beetle, tartness insects examined. Weevil, rice bits, bits of corn pests are discussed.
12	Theoretical	Barley moth, warehouse moth attachment, clothes moth, moth pests , wool moths, mite species, mice and rats
13	Theoretical	Postharvest diseases and control methods
14	Theoretical	Factors affecting the development of post-harvest diseases, post-harvest post-harvest diseases of the mechanism of resistance of pathogens to attack the mechanisms of host resistance against the host

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	3	42
Assignment	2	4	0	8
Individual Work	1	5	0	5



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	To be able to learn economic importance of postharvest diseases
2	To be able to learn important postharvest diseases
3	To be able to describe species of stored products pests.
4	To be able to learn damage type of pests on products and which pest species is detrimental on which stored products.
5	To be able to learn control methods against different stored products pests.
6	To be able to learn to control against to postharvest pathogens

### 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	4	4	4	4	3	4
P2	4	4	4	4	3	4
P3	4	4	4	4	3	4
P4	4	4	4	4	4	4
P5	4	4	4	4	3	3
P6	4	4	4	3	2	2
P10	3	3	3	3	4	4

