PESTS OF FIELD CROPS											
1	Course Title:	PESTS (	OF FIELD CROPS								
2	Course Code:	BTK4621-Z									
3	Type of Course:	Compuls	sory								
4	Level of Course:	First Cyc	le								
5	Year of Study:	4									
6	Semester:	7									
7	ECTS Credits Allocated:	4.00									
8	Theoretical (hour/week):	2.00									
9	Practice (hour/week):	2.00									
10	Laboratory (hour/week):	0									
11	Prerequisites:	It is reco the lesso	mmended to be preferred by the students who succeed at on of Entomology.								
12	Language:	Turkish									
13	Mode of Delivery:	Face to f	ace								
14	Course Coordinator:	Prof. Dr.	İSMAİL ALPER SUSURLUK								
15	Course Lecturers:										
16	Contact information of the Course Coordinator:	susurluk@uludag.edu.tr (0 224) 294 15 79 Uludağ Üniversitesi, Ziraat Fakültesi, Bitki Koruma Bölümü									
17	Website:										
18	Objective of the Course:	Recognition of pests of field crops and teaching of their control methods with regarded to plant protection.									
19	Contribution of the Course to Professional Development:	Graduates who take this course will have the potential to produce solutions since they have information about the pests encountered in field crop production.									
20	Learning Outcomes:		-								
		1	To recognize the most important species of pests of field crops in the world.								
		2	To know features of most important species.								
		3	To diagnose the most important pests of field crops.								
		4	To suggest control methods of pests to producer.								
		5	To know time of control against pests.								
		6	-								
		7	-								
		8	-								
		9	-								
		10	-								
21	Course Content:										
14/		Co	burse Content:								
Week	Practice										

1	About nematodes and parasitic nematodes on field crops are taught.	About Digestive system, excretory system, nervous system, reproduction system, growing, effectiveness of plants, moving ways of nematodes, methods of sampling of nematodes belong to class of Nematoda and Wheat gall nematode Anguina tritici, Root-knot nematode Meliodogyne spp., Stem nematode Ditylenchus dipsaci, The cereal cyst nematode Heterodera avenae, Sugar beet cyst nematode Heterodera schachtii, White tip nematode Aphelenchoides besseyi are given information. About mites which belong to order of Acarina given general information. A mite body is drawn and about belong to phylum of Penthaloidae Winter grain mite Penthaleus major is informed. Preparations and slides about these issues are scanned								
2	Species of mollusk, worm, mites which are detrimental on field crops and control methods of these pests are taught.	About Moroccan locust Dociostaurus maroccanus, The migratory locust Locusta maroccanus, Arcyptera labiata (Orthoptera: Acrididae) and Italian locust Calliptamus italicus (Orthoptera: Catantopidae) are given information and taught differences between these species.								
3	Locusts species which are detrimental on field crops and their control methods are taught.	About Isophya spp., Poecilimon spp., Platycleis intermedia (Orthoptera:Tettigonidae) and Melanogryllus desertus, Oecantus pellucens (Orthoptera: Gryllidae) are given information.								
4	Gryllotalpa gryllotalpa and Cephus pygmaeus, Trachelus tabidus, T. libanensis which are detrimental on field crops are recognized. Biology and control methods of	About Eurygaster spp. are given information. In addition, differences of between species are lectured and drawn. Samples of Eurygaster spp. are scanned. A film about biology, injury types and control methods of Eurygaster								
Activit	es	Number	Duration (hour)	Total Work Load (hour)						
Theore	t <b>aal</b> ght.	are4scanned.	2.00	28.00						
Practica	als/Labs	14	2.00	28.00						
Self stu	କିତ୍ୟୁକାହିହେମ୍ପର୍କାହିହେମ୍ପର and control methods of	Coleoptera:Scarabaeida	e) are given inform	ation <sup>0</sup> Related						
Homew	vorks	0	0.00	0.00						
Project	Ostrinia nubilalis and Bruchus spp. are	Apout Pachytychius nor	del (Coleoptera:Cul era:Chrysomelidae	cuilonidae), Adriotes spp						
Field S	tudies	0	0.00	0.00						
Midtern	n exams	siges and samples are	scanneo.	10.00						
Others	u tollo tingkanallo Litiamuta diagtina Ctana	0	0.00	0.00						
Final E	Biology and control methods of these pests	(Lepidoptera Noctuidae)	,15000tis spp. Lepic	obtoca						
Total W	/ork Load		Chadoptoro ovigu	127.00						
Total w	ork load/ 30 hr	slides and samples are	scanned.	3.90						
ECTS (	Credit of the Course			4.00						
	Biology and control methods of these pests are taught.	(Hymenoptera:Cephidae slides and samples are	e) are given informa scanned.	tion. Related						
10	Pests of cotton are recognized. Biology and control methods of these pests are taught.	About Callasobruchus maculatus, Acanthocelides obtectus, Bruchus ervi, Bruchus signaticornis, Bruchus lentis, Bruchus pisorum, Bruchus rufimanus (Coleoptera:Bruchidae) are given information. Related slides and samples are scanned.								

11	Pes and taug	ts of cont ght.	sugar rol me	beet a	are reader of the	cognize ese pes	ed. B sts ar	iology e	Ab La Sit Lir inf	About Etiella zinckenella (Lepidoptera:Pyralidae), Lampides boeticus(Lepidoptera:Lycaenidae), Sitona crinitus (Coleoptera:Curculionidae), Liriomyza cicerina (Diptera: Agromyzidae) are given information. Related slides and samples are scanned.										
12	Pests of sunflowers, potato, tobacco, soybean and mouses are recognized. Biology and control methods of these pests are taught.									About Hypera variabilis (Coleoptera:Curculionidae), Gonioctena fornicata (Coleoptera:Chrysomelidae), Subcoccinella vigintiquatuorpunctata (Coleoptera: Coccinellidae), Bembecia scopigera (Lepidoptera: Sessidae), Sphenoptera carceli (Coleoptera: Buprestidae), Plagionotus floralis (Coleoptera:Cerambycidae) and Aphids which are detrimental on feed crops are given information. Related slides and samples are scanned.										
13	Rep	eatin	g cou	rses a	nd mi	dterm	exam	I	Pr	actice	Exam									
14	-								-											
22	Tex Mat	Textbooks, References and/or Other Materials:									Zirai Mücadele Teknik Talimatları (Cilt1,6). Bitki Koruma Ürünleri									
23	Ass	esme	ent						- 1											
TERML	_EAR	NING		VITIES	;			NUMBE R		EIGHT										
Midtern	n Exa	am						1	40	.00										
Quiz							(	0	0.0	0.00										
Home \	work	-proje	ect				(	0	0.0	0.00										
Final E	xam							1	60	60.00										
Total 2								10	100.00											
Contrib Succes	outior ss Gr	n of T ade	erm (`	Year)	Learn	ing Act	ivitie	s to	40	40.00										
Contrib	outior	n of F	inal E	xam to	Suco	cess G	rade		60	60.00										
Total									10	100.00										
Measu Course	reme	ent an	id Eva	luatio	n Tec	hnique	s Use	ed in th	ie As ev	Assessment is made as 1 midterm and 1 final exam and evaluated with relative evaluation.										
24	EC	TS /	WO	RK L	OAD	TAB	LE													
25				CON	TRIE	BUTIO	N O	F LE	ARN QUA	ling Lific	OUTC ATIO	COME NS	S TO I	PROG	GRAMI	ME				
		PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ1 0	PQ11	PQ12	PQ1 3	PQ14	PQ15	PQ16			
ÖK1		0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
ÖK2		0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
ÖK3		0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
ÖK4		0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0			
ÖK5	0 0 2 0 0 0 0							0	0	0	0	0	0	0	0	0	0			
ÖK6		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
ÖK7		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			

ÖK8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contrib 1 very low ution Level:				2 Iow		3 Medium			4 High			5 Very High				