NEW BREEDING METHODS											
1	Course Title:	NEW BF	REEDING METHODS								
2	Course Code:	MBG412	23								
3	Type of Course:	Optional									
4	Level of Course:	First Cyc	le								
5	Year of Study:	4									
6	Semester:	7									
7	ECTS Credits Allocated:	6.00									
8	Theoretical (hour/week):	3.00									
9	Practice (hour/week):	0.00									
10	Laboratory (hour/week):	0									
11	Prerequisites:										
12	Language:	Turkish									
13	Mode of Delivery:	Face to	face								
14	Course Coordinator:	Prof. Dr.	AYDIN TÜRKEÇ								
15	Course Lecturers:										
16	Contact information of the Course Coordinator:	Prof. Dr. Aydın Türkeç aturkec@uludag.edu.tr B.U.Ü. Fen Edebiyat Fakültesi Moleküler Biyoloji ve Gnetik Bölümü									
17	Website:										
18	Objective of the Course:	The objective of the course is to Learn the principle and applications of commonly used techniques in recombinant DNA technology, applications for advanced techniques used in recombinant DNA technology and new plant breeding techniques. Student will gain the ability to use recombinant DNA technologies and to interpret the results obtained in MSc and PhD studies. It is aimed to teach rekombinant DNA technology to provide a strong baseline for new plant breeding methods									
19	Contribution of the Course to Professional Development:	To have knowledge about plant breeding in order to work in the laboratories and companies in the field of biotechnology									
20	Learning Outcomes:										
		1	Students will have detailed knowledge about biotechnology and common techniques in recombinant DNA technology								
		2	Students will have detailed knowledge about the principles of advanced techniques in recombinant DNA technology								
		3	Students will have detailed knowledge about agricultural biotechnology								
		4	Students will have detailed knowledge about 'Genetically modified Organisms (GMO) and transgenic plant'								
		5	Students will have detailed knowledge about plant breeding and new plant breeding methods								
		6									
		7									
		8									
		9									
		10									
21	Course Content:										
		Co	ourse Content:								

Week	Theoretical		Practice								
1	The definition and importance of biotechnology, introductionto plant biotechnology										
2	Recombinant DNA technology: Princ gene cloning	iples of									
3	Recombinant DNA technology: Identi of gene in DNA sequence	ification									
4	Recombinant DNA technology: Analyses of gene expression										
5	Recombinant DNA technology: Analyses of gene function										
6	Molecular markers										
7	Application of agricultural biyotechno	logy									
8	Plant biotechnology:Gene transforma	ation									
9	Plant biotechnology: Development of transgenic plants										
10	Plant biotechnology: Doku kültür yön	temleri									
11	Plant breeding and marker assisted s (MAS)	selection									
12	New plant breeding methods										
13	New plant breeding methods										
Activit	es			Number	Total Work Load (hour)						
Theore	lical			14	3.00	42.00					
Practicals/Labs				0	0.00	0.00					
Self stu	dy and preperation		В	3 skı2002, Isbn 975-66	5124,000-7	42.00					
Homew	vorks			4	7.00	28.00					
Project	8		U	vgulamalar, ÇeviriEdit	öo<u>l</u>@no∵ Hüseyin Avni	Ö lote m, Meral					
Field St	tudies			0	0.00	0.00					
Midtern	n exams		- Alick, B.R., Pasternak, 2010 Molecular Bioteonmolog								
Others				14	2.00	28.00					
Final E	kams				20.00						
Total W	/ork Load					200.00					
Total w	ork load/ 30 hr		L	usser M., Parisi C., Da	mien P, Rodriquez-	Gerezo E.,					
ECTS (Credit of the Course					6.00					
			Technical Reports, 2011								
			- \	- Web sites							
23	Assesment										
TERM L	EARNING ACTIVITIES	NUMBE R	w	EIGHT							
Midtern	n Exam	1	4(0.00							
Quiz		0	0.	00							
Home v	vork-project	0	0.00								
Final E	xam	1	60.00								
Total		2	100.00								
Contrib Succes	ution of Term (Year) Learning Activitie s Grade	es to	4(0.00							

Contribution of Final Exam to Success Grade									60.00										
Total										100.00									
Measuren Course	nent ar	nd Eva	luatio	n Tec	hnique	s Use	d in th	ie Th	e syste	em of r	elative	evaluat	ion is a	applied					
24 E	CTS/	' WO	RK L	OAD	TAB	LE													
25			CON	TRIE	BUTIC	N O	F LE. (ARN QUA	ing (Lific		COME NS	S TO I	PROC	GRAMI	ME				
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ1 0	PQ11	PQ12	PQ1 3	PQ14	PQ15	PQ16			
ÖK1	4	5	3	4	4	4	5	3	3	5	0	0	0	0	0	0			
ÖK2	4	4	4	5	4	5	5	4	5	5	0	0	0	0	0	0			
ÖK3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
ÖK4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
ÖK5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
			LO: L	earr	nina (bied	tive	s P	Q: P	rogra	im Qu	alifica	tions		-	•			

ÖK5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			LO: L	earr	ning C	bjec	tive	s P	Q: P	rogra	m Qu	alifica	tions	;		
Contrib ution Level:	1 very low		2 low		3 Medium			4 High			5 Very High					