

## GENETICS II LAB

1	Course Title:	GENETICS II LAB
2	Course Code:	BYL3052
3	Type of Course:	Compulsory
4	Level of Course:	First Cycle
5	Year of Study:	3
6	Semester:	6
7	ECTS Credits Allocated:	2.00
8	Theoretical (hour/week):	0.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	2
11	Prerequisites:	None
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. NİLÜFER ÇİNKILIÇ
15	Course Lecturers:	Prof. Dr. Tolga ÇAVAŞ Prof. Dr. Nilüfer ÇİNKILIÇ Prof. Dr. Serap ÇELİKLER KASIMOĞULLARI Doç. Dr. Özgür VATAN
16	Contact information of the Course Coordinator:	Uludağ Üniversitesi Fen-Edebiyat Fakültesi Biyoloji Bölümü Görükle Kampüsü, Nilüfer/BURSA 16059 e-posta: tcavas@uludag.edu.tr Telefon: 0 224 294 1869  Uludag University Faculty of Arts and Science Department of Biology Gorukle Campus, Nilufer/BURSA 16059 e-mail: tcavas@uludag.edu.tr Phone: 0 224 294 1869
17	Website:	
18	Objective of the Course:	The course will provide practices of the Genetics II lecture and will support students' theoretical learnings .
19	Contribution of the Course to Professional Development:	
20	Learning Outcomes:	
	1	Knowledge of the molecular methods of genetic analysis
	2	Analyze and interpret the experimental results
	3	To gain the ability to transfer which clearly and accurately the results of experiments
	4	To gain the ability to use current information
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21	Course Content:	
	Course Content:	

Week	Theoretical	Practice
1		General Laboratory Rules
2		Investigation Of Prokaryotic DNA
3		Investigation Of Prokaryotic Eukaryotic DNA
4		Polytene Chromosomes
5		DNA Replication And SCE And FISH
6		Midterm Exam, repeating lecture
7		DNA Extraction And Determining Of DNA SpectrumAgarose Gel Electrophoresis of DNA
8		PCR, RFLP And PAGE
9		Chromosome Banding
10		Gen Regulation: Lac Operon In E. Coli
11		A) Chromatography Of Eye Pigments In Drosophila, B) Conditional Mutants In Yeasts
12		Fluctuation Tests.
13		Chemical And Physical Mutagenesis
14		Quantitative And Polygenic Inheritance

22	Textbooks, References and/or Other Materials:	Genetik Lab. Uygulama kılavuzu.
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23	Assesment
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TERM LEARNING ACTIVITIES	NUMBE	WEIGHT		
Activites		Number	Duration (hour)	Total Work Load (hour)
Theoretical		0		
Home Work-project	13	10.00	0.00	0.00
Practicals/Labs		14	2.00	28.00
Self study and preperation	18	10.00	0.00	0.00
Total				
Homeworks		13	1.00	13.00
Success Grade Projects		0	0.00	0.00
Field Studies		0	0.00	0.00
Midterm exams		10.00	9.00	9.00
Others		0	0.00	0.00
Course Exams		1	12.00	12.00
Total Work Load				71.00
Total work load/ 30 hr				2.07
ECTS Credit of the Course				2.00

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0
ÖK2	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0
ÖK3	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0
ÖK4	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0
LO: Learning Objectives    PQ: Program Qualifications																

<b>Contribution Level:</b>	<b>1 very low</b>	<b>2 low</b>	<b>3 Medium</b>	<b>4 High</b>	<b>5 Very High</b>
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