

GENETICS

1	Course Title:	GENETICS	
2	Course Code:	TOHZ101	
3	Type of Course:	Compulsory	
4	Level of Course:	Short Cycle	
5	Year of Study:	1	
6	Semester:	1	
7	ECTS Credits Allocated:	3.00	
8	Theoretical (hour/week):	2.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:	None	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. İbrahim Çakmak	
15	Course Lecturers:	Doç.Dr. İbrahim Çakmak	
16	Contact information of the Course Coordinator:	Doç.Dr. İbrahim Çakmak	
17	Website:		
18	Objective of the Course:	To teach students about basic genetic principles and how characters are passed to next generations	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	To gain knowledge about animal and plant cell structure and genetic materials
		2	To learn how characters are passed to next generations in organisms
		3	To gain knowledge about the mechanisms of heredity
		4	To get ideas about gene relations and environmental effects
		5	To get knowledge about sex –linked genes their passage to next generations
		6	To learn about polygenes and how their frequencies are calculated
		7	To see non-nucleus heredity and linkage
		8	To learn mutations and the effects of environmental factors
		9	
		10	
21	Course Content:		
		Course Content:	
Week	Theoretical	Practice	
1	Genetics and Mendel		
2	Cell division and Chromosomes		
3	Mendel Genetics		
4	Dominance and Alell genes		

5	Gene expression and Environmental effects	
6	Gene interaction and Lethality	
7	Sex-linked genes and expression	
8	Repeating courses and midterm exam	
9	Quantitative genetics	
10	Population Genetics	
11	Cytoplasmic heredity	
12	Genetic linkage and crossing-over	
13	Mutations	
14	Genetics and Environment	

22	Textbooks, References and/or Other Materials:	Bozcuk, AN. 2005. Genetik. Palme Yayıncılık, Ankara. Campbell, NA., Reece, JB. 2006. Biyoloji. Palme Yayıncılık (Çevirenler: Gündüz ve diğ.), Ankara. Ayala, FJ. 1982. Population and evolutionary genetics. The Benjamin/Cumming Publishing Company, Inc. USA.
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23	Assesment	
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TERM LEARNING ACTIVITIES	NUMBER	WEIGHT		
Midterm Exam	1	40.00		
Quiz	0	0.00		
Home work-project	0	0.00		
Activites		Number	Duration (hour)	Total Work Load (hour)
Contribution of Term (Year) Learning Activities to Success Grade	40.00	14	2.00	28.00
Practicals/Labs	0	0.00	0.00	0.00
Contribution of Final Exam to Success Grade	60.00	14	1.00	14.00
Self study and preperation	40.00			
Homeworks	0	0.00	0.00	0.00
Measurement and Evaluation Techniques Used in the Projects	0	0.00	0.00	0.00
Field Studies	0	0.00	0.00	0.00
Midterm exams	1	24.00	24.00	24.00
Others	0	0.00	0.00	0.00
Final Exams	1	24.00	24.00	24.00
Total Work Load				90.00
Total work load/ 30 hr				3.00
ECTS Credit of the Course				3.00

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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK2	0	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0
ÖK3	0	0	3	0	0	0	0	0	0	3	0	0	0	0	0	0
ÖK4	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0

ÖK5	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0
ÖK6	0	0	0	0	0	3	2	0	2	4	0	0	0	0	0	0
ÖK7	0	0	0	0	0	0	2	0	1	0	5	0	0	0	0	0
ÖK8	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	1 very low			2 low			3 Medium			4 High			5 Very High			