GENETIC

1	Course Title:	GENETIC	
2	Course Code:	VET1019	
3	Type of Course:	Compulsory	
4	Level of Course:	First Cycle	
5	Year of Study:	1	
6	Semester:	1	
7	ECTS Credits Allocated:	2.00	
8	Theoretical (hour/week):	2.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:	None	
12	Language:	English	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Doç.Dr. ÖZDEN ÇOBANOĞLU	
15	Course Lecturers:		
16	Contact information of the Course Coordinator:	e-mail: cobanog@yahoo.com U.Ü. Veteriner Fakültesi Genetik Anabilim Dalı Nilüfer/BURSA	
17	Website:		
18	Objective of the Course:	To educate students about the source of variations of living organism, the effect of genotype on this variations, what is the means of inherited of genetic information generation to generation, what is the gene, gene structure, interactions between genes, interactions of genetic x environment, inherited disorders, eliminations of genetic disorders, mutations, heredity mechanism, population genetics and biotechnological methods related to genetics.	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	They learn the basic concepts of the genetic
		2	They learn the reasons of the difference between the animates and utilize these information about protecting races and animal improvement
		3	They learn the roles of genes on heredities and gain the information about the different behaviours of genes and the interactions of genes.
		4	They acquire the structures and functions of the chromosomes and genes.
		5	They know the contribution of genetic on the appearance of diseases and don’t blink the genetic elements can be into the aetiology of diseases.
		6	They learn determination of race, parents / parental tests and how can they utilize the genetic structure in the same areas.
		7	They gain information about using the molecular techniques on the animal improvement& the treatment of their diseases.
		8	They learn structure of DNA and RNA
		9	They learn protein metabolism
		10	They learn basic information about MAS, GAS and QTL

21	Course Content:	
	Course Content:	
Week	Theoretical	Practice
1	Introduction of genetic, character, phenotype, genotype, environment, environment x genotype introduction, variations.	
2	Kinds of gene and its heredity. (dominant and recessive heredity, intermediary heredity), freedom of genes and gametes.	
3	Testing combinations. (mono hybridisms, bi hybridisms, tri hybridisms, poly hybridisms), Formulas which can be helpful for combinations.	
4	Cells as genetic (cell morphology, cytoplasm, core, chromatin, Barr substances, DNA, RNA, proteins, DNA synthesis, DNA regeneration, RNA synthesis).	
5	Chromosomes (Chromosome morphology, Chromosome types, cerotype, thin structure of chromosomes, huge Chromosomes).	
6	Genes and genetic code (structural genes, operator genes, regulator genes, the role of cytoplasm on heredity, protein synthesis on cell).	
7	Division of cell as genetic and the importance of genetic division, crossing over.	
9	Lethal genes, struggle methods with lethal	
10	Immunogenetic (blood groups of domesticated animals, using techniques for relations of blood groups with efficiency).	
11	Recombination (conjugation, transduction	
12	Mutations, (deficiency, deletion, inversion,	
13	Changes of chromosome numbers.	

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	10	1.00	10.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm Exams	1	10.00	10.00
Others	0	0.00	0.00
Final Exams	1	12.00	12.00
Total Work Load			60.00
Total work load/ 30 hr			2.00
ECTS Credit of the Course			2.00

2. Medikal Genetik İlkeler, Şaylı, B. S., Türkiye Klinikleri Yayınevi, 1995.
3. Genetics of Livestock Improvement, Lasley, J. F., Prentice-Hall Inc., Englewood Cliffs, New Jersey, 1998.
4. Genetics and analysis of Quantitative Traits. Lynch, M., Walsh, B. Sinauer Associates Inc., Sunderland, Massachusetts, 1997.
5. Genetik, Erensayın, C., Nobel Yayın Dağıtım, Ankara, 2000.
6. Veteriner Genetik, Odabaşıoğlu F., 2005.
7. Genetics A Conceptual Approach Second Edition, Pierce B. A., 2006

23	Assesment

TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	1	40.00
Quiz	1	10.00
Home work-project	0	0.00
Final Exam	1	50.00
Total	3	100.00
Contribution of Term (Year) Learning Activities to Success Grade		50.00
Contribution of Final Exam to Success Grade		50.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		

24 ECTS / WORK LOAD TABLE

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	5	3	1	1	5	5	3	2	3	2	2	4	0	0	0	0
ÖK2	5	3	1	3	5	5	2	2	2	2	4	5	0	0	0	0
ÖK3	5	3	1	2	5	5	2	3	4	1	4	5	0	0	0	0
ÖK4	5	3	1	2	5	5	2	3	4	1	4	5	0	0	0	0
ÖK5	5	3	1	1	5	5	3	2	3	2	2	4	0	0	0	0
ÖK6	5	3	1	3	5	5	2	2	2	2	4	5	0	0	0	0
ÖK7	5	3	1	2	5	5	2	3	4	1	4	5	0	0	0	0
ÖK8	5	3	1	2	5	5	2	3	4	1	4	5	0	0	0	0
ÖK9	5	3	1	2	5	5	2	3	4	1	4	5	0	0	0	0
ÖK10	5	3	1	2	5	5	2	3	4	1	4	5	0	0	0	0

LO: Learning Objectives PQ: Program Qualifications

Contribution Level:	1 very low	2 low	3 Medium	4 High	5 Very High