

MEDICAL BIOLOGY

1	Course Title:	MEDICAL BIOLOGY
2	Course Code:	VET1021
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:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. HALE ŞAMLI
15	Course Lecturers:	Doç.Dr. Sena Ardıçlı, Araş.Gör.Dr. Deniz DİNÇEL
16	Contact information of the Course Coordinator:	halesamli@uludag.edu.tr U.Ü. Veteriner Fakültesi Genetik Anabilim Dalı Nilüfer/BURSA
17	Website:	
18	Objective of the Course:	To teach the description of the medical biology, structure of and function of the cell, cellular circumstances on molecular basis, the structure of the cell membrane, transport mechanisms of the cell membrane, molecular structure of the genetic material, replication of genetic material, protein synthesis, structure of the chromosome, mutations, control mechanisms of cell division, cell cycle and cell differentiation metabolism, carcinogenesis and evolution.
19	Contribution of the Course to Professional Development:	
20	Learning Outcomes:	
	1	They learn the science of cell and biology and the sub-branches of biology.
	2	They learn the elements that make up the cell structure and their duties; comprehend cellular events at the molecular level.
	3	They learn the structure of hereditary material and the changes of them that occur at the molecular level.
	4	They learn the control of cell division at the molecular level and learn the mutation mechanisms.
	5	They learn the intracellular and intercellular signal transmission mechanisms and apoptosis.
	6	They have an opinion about cancer development mechanisms at the cellular level.
	7	They learn about the creation of living things and the mechanism of evolution.
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21	Course Content:	
	Course Content:	
Week	Theoretical	Practice

1	A general overview, introduction to course objectives, content, processing and reference books, describing biology and its sub-branches			
2	Introduction to cell science, methods of studying cells			
3	Description of structural traits of cell organelles and their functions			
4	Identification the cytoskeleton and its functions			
5	Definition of the cell membrane and its function			
6	Description of the structure and the function of genetic material			
7	Identification of the transcription and translation.			
8	Definition of mutation and types of mutations			
9	Post-transcriptional mechanisms			
10	Investigation of cell division in terms of genetic material			
11	Cell signaling			
12	Apoptosis, the molecular mechanism of aging, the importance of apoptosis in the development and differentiation of the organisms			
13	Germogenesis and Germlineogenesis			
Activites		Number	Duration (hour)	Total Work Load (hour)
22	Theoretical	14	2.00	28.00
Textbooks, References and/or Other Materials:		1. Campbell, Jane B. Reece, Lisa A. Urry, Michael E. Cain, Steven A. Wasserman, Peter V. Minorsky, Robert		
Practicals/Labs		0	0.00	0.00
Self study and preperation		2	5.00	10.00
Homeworks		0	0.00	0.00
Projects		3	0.00	0.00
Field Studies		0	0.00	0.00
Midterm exams		Kıtaevi, Ankara, 2018.	10.00	10.00
Others		0	0.00	0.00
Final Exams		Biyoloji ve Genetik, Akademisyen Kitabevi, Ankara, 2018.	10.00	10.00
Total Work Load				60.00
Total work load/ 30 hr		Dağıtım Tic.Ltd. Şti. Ankara, 2010.		2.00
ECTS Credit of the Course				2.00
23	Assesment			
TERM LEARNING ACTIVITIES		NUMBER	WEIGHT	
Midterm Exam		1	30.00	
Quiz		1	10.00	
Home work-project		0	0.00	
Final Exam		1	60.00	
Total		3	100.00	
Contribution of Term (Year) Learning Activities to Success Grade		40.00		
Contribution of Final Exam to Success Grade		60.00		
Total		100.00		

24	ECTS / WORK LOAD TABLE
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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
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	1 very low			2 low			3 Medium			4 High			5 Very High			