CELL BIOLOGY

1	Course Title:	CELL BIOLOGY
2	Course Code:	TÜB5017
3	Type of Course:	Optional
4	Level of Course:	Second Cycle
5	Year of Study:	1
6	Semester:	1
7	ECTS Credits Allocated:	3.00
8	Theoretical (hour/week):	1.00
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. ZEHRA MİNBAY
15	Course Lecturers:	Prof. Dr. Zehra MİNBAY Prof. Dr. Semiha ERSOY Prof. Dr. Özhan EYİGÖR Doç. Dr. Berrin AVCI Dr. Öğr. Üyesi Duygu GÖK YURTSEVEN
16	Contact information of the Course Coordinator:	zminbay@uludag.edu.tr (224) 295 40 64 Bursa Uludağ Üniversitesi Tıp Fakültesi Histoloji ve Embriyoloji AD 16059 Nilüfer Bursa
17	Website:	http://tip.uludag.edu.tr/histoloji-embriyoloji/
18	Objective of the Course:	The aim of this course is is to provide students with an understanding of eukaryotic cell structure and function. It also provides students with an appreciation of the interaction of cells within and among the various tissues and organ systems
19	Contribution of the Course to Professional Development:	This course is important in terms of gaining basic knowledge within the scope of in master degree education.
20	Learning Outcomes:	

	1	Understand the basic components of prokaryotic and eukaryotic cells, list their similarities and differences
	2	Explain the functions and histological features of cell components such as cell membrane, cytoplasm, organelles, nucleus and nucleolus
	3	Define and compare gamete, zygote, somatic cells, and germ cells
	4	Know cell cycle and mitotic and mayotic cell division
	5	Predict the functional deficit(s) that would occur in a cell as a result of specific structural aberrations
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21	Course Content:
	Course Content:

Week	Theoretical	Practice
1	Introduction to the cell, prokaryotic and eukaryotic cell	
2	Structure of cell membranes	
3	Functions of cell membranes	
4	Mitochondria and energy production	
5	Ribosomes and protein synthesis	
6	Endoplasmic reticulum	
7	Golgi apparatus and endosome	
8	Lysosome, proteasome and peroxisome	
9	Cytoskeleton	
10	Cell nucleus I	
11	Cell nucleus II	
12	Cell cycle	
13	Mitosis and meiosis	
14	Programed cell death	

22	Textbooks, References and/or Other Materials:	Kierszenbaum AL, Tres LL. Histology and Cell Biology: An Introduction to Pathology. 4rd ed. Philadelphia: Elsevier Saunders; 2012. Ovalle WK, Nahirney PC. Netter's Essential Histology: with Correlated Cell and Molecular Biology, 6th ed. Philadelphia: LWW; 2011.

23	Assesment				
Activites			Number	Duration (hour)	Total Work Load (hour)
Theoretical			14	1.00	14.00
Practicals/Labs			0	0.00	0.00
Self study and preperation			14	2.00	28.00
Homeworks			0	0.00	0.00
Projects			0	0.00	0.00
Field Studies			0	0.00	0.00
Midterm exams			0	0.00	0.00
Others			4	6.00	24.00
Final Exams			1	18.00	18.00
Total Work Load					84.00
Total work load/ 30 hr					2.80
ECTS Credit of the Course					3.00
Midterm Exam	0	0.00			
Home work-project	0	0.00			
Total	5	100.00			
Contribution of Term (Year) Learning Activities to Success Grade		20.00			
Contribution of Final Exam to Success Grade		80.00			
Total		100.00			
Measurement and Evaluation Techniques Used in the Course		Measurement and evaluation are performed according to the Rules & Regulations of Bursa Uludağ University on Undergraduate Education.			

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	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0
ÖK2	5	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0
ÖK3	5	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0
ÖK4	5	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0
ÖK5	5	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	**1 very low**		**2 low**			**3 Medium**			**4 High**			**5 Very High**				