COMPARATIVE HISTOLOGY OF HUMAN AND LABORATORY ANIMALS

1	Course Title:	COMPARATIVE HISTOLOGY OF HUMAN AND LABORATORY ANIMALS	
2	Course Code:	THE5019	
3	Type of Course:	Optional	
4	Level of Course:	Second Cycle	
5	Year of Study:	1	
6	Semester:	1	
7	ECTS Credits Allocated:	2.00	
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	
16	Contact information of the Course Coordinator:	zminbay@uludag.edu.tr (0224) 295 40 64 Bursa Uludağ Üniversitesi, Tıp Fakültesi, Histoloji ve Embriyoloji Anabilim Dalı, 16059 Nilüfer, BURSA	
17	Website:		
18	Objective of the Course:	To educate researchers who are aware of the histological differences between experimental animals and human tissue 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	Describe phenotypic features of animal models
		2	Compare developmental stages in experimental animal models with human’s
		3	Know the ovarian cycle of animal models and their differences
		4	Tells about histological differences between animal models and humans at the level of tissues and organ systems
		5	Identifies histological differences between animal models and humans on the basis of tissues and organs systems at the microscopic level
		6	Decide the animal model to be used in the own experiments
		7	
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21	Course Content:		
	Course Content:		

Week	Theoretical	Practice
1	Overview to course, representative features and major differences between human rat and rat mouse, early mouse development	
2	Late embryonic development in mouse and rat, comparison of pnenatal and postnatal development in the animal models (mouse, rabbit and rat)	
3	Ostrous cycle in animal models	
4	Differences in the skeletal systems between animal models and human	
5	Differences in respiratory system between animal models and human	
6	Histological differences in the cardiovascular system	
7	Histological differences in the gastrointestinal system	
8	Histological differences in organs associated to the digestive tract	
9	Histological differences in the endocrine system and mammary glands	
10	Histological differences in the urinary system	
11	Histological differences in female and male genital systems	
12	Histological differences in hemopoietic and lymphoid systems and skin	
13	Materials.	Anatomy And Histology- A Mouse Rat and Human Atlas. 2nd edition. London: Academic Press, 2018. 2. https://pubmed.ncbi.nlm.nih.gov/
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	**R**	0	0.00	0.00
Others		0	0.00	0.00
Quiz	0	0.00	14.00	14.00
Final Exams		1		56.00
Final Exam	1	100.00		1.87
Total Work Load / 30 hr				2.00
ECTS Credit of the Course				

Contribution of Term (Year) Learning Activities to Success Grade	0.00
Contribution of Final Exam to Success Grade	100.00
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	5	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0
ÖK2	5	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0
ÖK3	5	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0
ÖK4	5	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0
ÖK5	5	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0
ÖK6	5	0	3	0	3	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**				