THE TISSUES BIOLOGY

1	Course Title:	THE TISSUES BIOLOGY	
2	Course Code:	TIP1006	
3	Type of Course:	Compulsory	
4	Level of Course:	First Cycle	
5	Year of Study:	1	
6	Semester:	2	
7	ECTS Credits Allocated:	3.00	
8	Theoretical (hour/week):	2.50	
9	Practice (hour/week):	1.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:	No	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Öğr.Gör. Tıp Fakültesi Öğrenci İşleri	
15	Course Lecturers:	Prof.Dr. Zeynep Kahveci, Prof. Dr. Semiha Ersoy, Prof. Dr. İlkin Çavuşoğlu, Prof. Dr. F. Zehra Minbay, Prof. Dr. Özhan Eyigör, Prof. Dr. Fadıl Özyener, Doç. Dr. Berrin Avcı	
16	Contact information of the Course Coordinator:	zminbay@uludag.edu.tr 295 4064 U.Ü. Tıp Fak. Histoloji ve Embriyoloji AD.	
17	Website:		
18	Objective of the Course:	The aim of this course is to explain development, structural organization, functions, histological and physiological characteristics of the epithelial, connective, adipose, cartilage, bone, nerve, muscle tissues and skin.	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	Realizing the four basic tissues and specialized tissues, and their properties.
		2	Recognizing the distinctive histological and staining properties of tissues and skin on microscopical images.
		3	Describing histogenesis and development of tissues.
		4	Realizing the functions of nerve fibers and action potential, relationship nerve metabolism to action potential.
		5	Stating the structure of neuromuscular junction, and transmission of the impulse in this region.
		6	Stating the basic contraction mechanism and difference of contraction mechanism among muscle types.
		7	Correlating microscopic structures of tissues with their functions.
		8	Speculating the outcome of breakdown of cells and tissues.
		9	
		10	
21	Course Content:		
	Course Content:		
Week	Theoretical	Practice	

1	Introduction to tissue structure and overview of the epithelial structure and functions (2 h).	Imaging methods in histology, types of microscopes and overview of histological preparation methods (2 h).
2	Cell surface specializations and classifications of epithelium (2 h).	
3	Classifications of epithelium (1 h) Connective tissue fibers (1 h).	Use of light microscope and examination of the slides (2 h).
4	Extracellular matrix and connective tissue cells (2 h)	
5	Classification of connective tissue and functions (1 h) Histology of adipose tissue (1 h).	Microscopy of epithelial, connective and adipose tissues (2 h).
6	Classification and histology of cartilage tissue (2 h)	
7	General structure and cells of bone tissue (2 h) Bone formation, remodeling, growth and bone repair (2 h)	Microscopy of cartilage and bone tissues (2 h).
8	Composition of nervous tissue and neuron and supporting cells of nervous tissue (2 h) Organization of peripheral nervous system and response of neurons to injury (1 h).	
9	Physiology of peripheral nervous system (2 h)	
10	Impulse conduction of at synapses (3 h)	Frog nerve-skeletal muscle study (2 h)
11	Overview and classification of muscle tissue and histology of skeletal muscle (2 h). Histology of cardiac and smooth muscle (1 h).	
12	Impulse conduction from nerve to muscle and (2 h). Physiology of skeletal muscle (2 h).	
13	Physiology of smooth muscle (2 h)	Frog skeletal musle study (2 h)
14	Histology and structure of skin (2 h)	Microscopy of muscle, nerve tissues and skin (2 h).
22	Textbooks, References and/or Other Materials:	Kierszenbaum AL, Tres LL. Histology and Cell Biology. 3rd edition. Philadelphia: Elsevier Saunders; 2012. Gardner LP, Hiatt JL. Color Textbook of Histology. Philadelphia: WB Saunders Company; 1997. Ross MH, Pawlina W. Histology. A Text and Atlas. 6th edition. Philadelphia: LWW; 2011. Ross MH, Pawlina W. Histology. A Text and Atlas. 5th edition. Baltimore: LWW; 2006. Junqueira LC, Carneiro J. Basic Histology, New York: McGraw-Hill Companies, 2003. Young B, Lowe JS, Stevens A, Heath JW. Wheater's Functional Histology: A Text and Colour Atlas. 5th edition. China: Churchill Livingstone; 2006. Ganong WF. Review of Medical Physiology. 23rd edition. New York: McGraw-Hill Medical; 2010. Guyton AC, Hall JE. Textbook of Medical Physiology. 12th edition. Philadelphia: Elsevier Saunders; 2010.
23	Assesment	

TERM LEARNING ACTIVITIES	**NUMBER**	**WEIGHT**
Midterm Exam	1	40.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	60.00

Total	2	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
Measurement and Evaluation Techniques Used in the Course		

24 ECTS / WORK LOAD TABLE

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.50	35.00
Practicals/Labs	14	1.00	14.00
Self study and preperation	14	1.00	14.00
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	15.00	15.00
Total Work Load			98.00
Total work load/ 30 hr			2.93
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	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK6	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK7	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK8	5	3	0	0	0	0	0	0	0	0	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