

# THE TISSUES BIOLOGY

<b>1</b>	Course Title:	THE TISSUES BIOLOGY
<b>2</b>	Course Code:	TIP1006
<b>3</b>	Type of Course:	Compulsory
<b>4</b>	Level of Course:	First Cycle
<b>5</b>	Year of Study:	1
<b>6</b>	Semester:	2
<b>7</b>	ECTS Credits Allocated:	3.00
<b>8</b>	Theoretical (hour/week):	2.50
<b>9</b>	Practice (hour/week):	1.00
<b>10</b>	Laboratory (hour/week):	0
<b>11</b>	Prerequisites:	No
<b>12</b>	Language:	Turkish
<b>13</b>	Mode of Delivery:	Face to face
<b>14</b>	Course Coordinator:	Öğr.Gör. Tıp Fakültesi Öğrenci İşleri
<b>15</b>	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
<b>16</b>	Contact information of the Course Coordinator:	zminbay@uludag.edu.tr 295 4064 U.Ü. Tıp Fak. Histoloji ve Embriyoloji AD.
<b>17</b>	Website:	
<b>18</b>	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.
<b>19</b>	Contribution of the Course to Professional Development:	
<b>20</b>	Learning Outcomes:	
	<b>1</b>	Realizing the four basic tissues and specialized tissues, and their properties.
	<b>2</b>	Recognizing the distinctive histological and staining properties of tissues and skin on microscopical images.
	<b>3</b>	Describing histogenesis and development of tissues.
	<b>4</b>	Realizing the functions of nerve fibers and action potential, relationship nerve metabolism to action potential.
	<b>5</b>	Stating the structure of neuromuscular junction, and transmission of the impulse in this region.
	<b>6</b>	Stating the basic contraction mechanism and difference of contraction mechanism among muscle types.
	<b>7</b>	Correlating microscopic structures of tissues with their functions.
	<b>8</b>	Speculating the outcome of breakdown of cells and tissues.
	<b>9</b>	
	<b>10</b>	
<b>21</b>	Course Content:	
		<b>Course Content:</b>
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)		
<b>Activites</b>		<b>Number</b>	<b>Duration (hour)</b>	<b>Total Work Load (hour)</b>
12	Impulse conduction from nerve to muscle and (2 h)	14	2.50	35.00
Practicals/Labs		14	1.00	14.00
Self study and preparation		14	1.00	14.00
Homeworks		0	0.00	0.00
14	Projects	0	0.00	0.00
Field Studies		0	0.00	0.00
Midterm Exams		Materials: 12th edition. Philadelphia: Elsevier Saunders; 2012. Gardner LP, Hiatt JL. Color Textbook of Histology		10.00
Others		0	0.00	0.00
Final Exams		Ross MH, Pawlina W. Histology. A Text and Atlas. 6th edition. Philadelphia: LWW; 2011.		15.00
Total Work Load				98.00
Total work load/ 30 hr		12th edition. Baltimore: LWW; 2006. Junqueira LC, Carneiro J. Basic Histology. New York:		2.93
ECTS Credit of the Course				3.00
		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.		
<b>23</b>	<b>Assesment</b>			
<b>TERM LEARNING ACTIVITIES</b>		<b>NUMBE R</b>	<b>WEIGHT</b>	
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		
<b>24</b>	<b>ECTS / WORK LOAD TABLE</b>	

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
<b>LO: Learning Objectives    PQ: Program Qualifications</b>																
<b>Contribution Level:</b>	<b>1 very low</b>			<b>2 low</b>			<b>3 Medium</b>			<b>4 High</b>			<b>5 Very High</b>			