TISSUE BIOLOGY

1	Course Title:	TISSUE BIOLOGY	
2	Course Code:	BYL0531	
3	Type of Course:	Optional	
4	Level of Course:	First Cycle	
5	Year of Study:	4	
6	Semester:	8	
7	ECTS Credits Allocated:	5.00	
8	Theoretical (hour/week):	3.00	
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. SiBEL TAŞ	
15	Course Lecturers:	Yok	
16	Contact information of the Course Coordinator:	Prof. Dr. Sibel TAŞ Uludağ Üniversitesi, Fen-Edebiyat Fakültesi, Biyoloji Bölümü e-posta: smeral@uludag.edu.tr Telefon: 0 (224) 294 1795 and Science, Department of Biology e-mail: smeral@uludag.edu.tr Phone: 0 (224) 294 1795	
17	Website:		
18	Objective of the Course:	Teaching types, structures and functions of the epithelial, connective, cartilage, bone, blood, muscle and nerve tissues seen in vertebrate animals.	
19	Contribution of the Course to Professional Development:	By learning the importance of tissues in living things, he / she can make a holistic evaluation.	
20	Learning Outcomes:		
		1	Knows the description of tissue biology and its methods of study, preparation techniques and types of microscopes.
		2	Knows the epithelial tissue structure, types, and their functions.
		3	Knows the connective tissue structure, types, fibers, cells and their functions.
		4	Knows the cartilage tissue structure, types, cells, their functions and histogenesis.
		5	Knows the bone tissue structure, types, cells, their functions and histogenesis.
		6	Knows the blood tissue structure, cell types and their functions with the plasma, lymph and hematopoiesis.
		7	Knows the muscle tissue structure, types, cells, their functions and mechanisms of contraction.
		8	Knows the neurons structure and their functions, types of glial cells, structure and functions.
		9	
		10	
21	Course Content:		
	Course Content:		

Week	Theoretical	Practice
1	Tissue definition, working methods. Preparation technique. Types of microscopes.	
2	Tissue types. The forms and properties of epithelial cells. Cell junctions. Specializations of the cell surface. Covering epithelia and types.	
3	Glandular epithelia and types. Serous, mucous and sero-mucous cells. Diffuse neuroendocrine system, myoepithelial cells and steroid secreting cells.	
4	Connective tissue and cells. Connective tissue ground substance.	
5	Fibers of connective tissue. Collagen, elastic and reticular fibers. Collagen synthesis.	
6	Types of connective tissue. Loose and tight connective tissue, elastic, reticular, adipose and mucous tissue.	
7	Structure of cartilage tissue. The cells and development of the cartilage. Hyaline, elastic and fibrous cartilage.	
8	Bone, types of bone cells and bone matrix. Endosteum and periosteum. Types of bone. Primary and secondary bone tissue.	
9	Histogenesis of bone. Endochondral and intramembranous ossification. Mechanisms of calcification. Bone growth and remodeling.	
10	Blood cells and platelets) types, structures and functions.	
11	Mechanisms of clotting.	
12	General structure of the muscle tissue and organization. Mechanism of contraction.	
13	Regeneration of muscle tissue.	
14	Nerve tissue and its development. Structures transmission. Glial cells and its types.	
15	Materials:	Prof. Dr. Meltem KURUŞ Histoloji Y ayınevi: Akademisyen Kitabevi

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	3.00	42.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	14	4.00	56.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	26.00	26.00
Others	0	0.00	0.00
Final Exams	1	26.00	26.00
Total Work Load			176.00
Total work load/ 30 hr			5.00
ECTS Credit of the Course			5.00

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	The system of relative evaluation is applied

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	0	3	0	3	3	3	0	0	0	0	0	0	0
ÖK2	0	0	0	0	3	0	3	3	3	0	0	0	0	0	0	0
ÖK3	0	0	0	0	3	0	3	3	3	0	0	0	0	0	0	0
ÖK4	0	0	0	0	3	0	3	3	3	0	0	0	0	0	0	0
ÖK5	0	0	0	0	3	0	3	3	3	0	0	0	0	0	0	0
ÖK6	0	0	0	0	3	0	3	3	3	0	0	0	0	0	0	0
ÖK7	0	0	0	0	3	0	3	3	3	0	0	0	0	0	0	0
ÖK8	0	0	0	0	3	0	3	3	3	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**			