

BASIC HISTOLOGICAL TECHNIQUES

1	Course Title:	BASIC HISTOLOGICAL TECHNIQUES	
2	Course Code:	BIO5519	
3	Type of Course:	Optional	
4	Level of Course:	Second Cycle	
5	Year of Study:	1	
6	Semester:	1	
7	ECTS Credits Allocated:	6.00	
8	Theoretical (hour/week):	3.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:		
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. SİBEL TAŞ	
15	Course Lecturers:		
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:	To teach basic histological techniques and features	
19	Contribution of the Course to Professional Development:	Improves preparation ability by learning basic histological techniques and properties.	
20	Learning Outcomes:		
		1	Histology lab recognizes ;
		2	Recognizes the chemicals used in histology, ;
		3	Apply the techniques of Histology ;
		4	Understands the principles of the new techniques, ;
		5	Elected to apply the techniques of preparation, ;
		6	Can produce solutions to problems encountered in practice ;
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		8	
		9	
		10	
21	Course Content:		
		Course Content:	
Week	Theoretical	Practice	
1	Histology techniques overview		
2	Advanced Histology techniques and their importance		
3	The appearance of cells in histological cross-section		

4	Paraffin technique	
5	Staining techniques for histologic preparations	
6	Selected preparation techniques	
7	Histochemistry	
8	Cytochemistry	
9	Immunohistochemistry	
10	Otoradyografi, histo otoradyografi	
11	Freeze-break technique break	
12	Transmission electron microscopy technique	
13	Scanning electron microscopy technique	
14	Artefacts	

22	Textbooks, References and/or Other Materials:	1- Hsu SM et al. J Histochem Cytochem 29 577-580, 1981 2- Microscopy, Immunohistochemistry, and Antigen Retrieval Methods, hayat M.A.2002.New York 3- Immunohistochemical methods and protocols, Javois L.C.1999,New Jersey 4- Applied immunohistochem, Taylor C.R., 1993 5-Temel Histoloji, Editör : Prof. Dr. Aytekin ÖZER, 2016
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23	Assesment	
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TERM LEARNING ACTIVITIES		NUMBE	WEIGHT			
Activites			Number	Duration (hour)	Total Work Load (hour)	
Theoretical						
Project		0	0	3.00	42.00	
Practicals/Labs			0	0.00	0.00	
Self study and preperation		1	10	5.00	70.00	
Homeworks			0	0.00	0.00	
Success Grade Projects			0	0.00	0.00	
Field Studies			0	0.00	0.00	
Midterm exams			1	0.00	0.00	
Others			0	0.00	0.00	
Course Final Exams			1	65.00	65.00	
Total Work Load					177.00	
Total work load/ 30 hr					5.90	
ECTS Credit of the Course					6.00	

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	0	3	4	3	2	0	4	1	0	0	0	0	0	0	0	0
ÖK2	0	0	2	2	0	0	3	1	1	0	0	0	0	0	0	0
ÖK3	1	2	2	4	0	0	3	1	1	0	0	0	0	0	0	0
ÖK4	2	2	4	4	0	0	3	1	1	0	0	0	0	0	0	0

ÖK5	4	0	4	4	0	0	3	1	1	0	0	0	0	0	0	0
ÖK6	4	1	3	3	0	1	3	1	1	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							