

GAZIANTEP ISLAMIC SCIENCE AND TECHNOLOGY UNIVERSITY GRADUATE EDUCATION INSTITUTE

COURSE CONTENT FORM

	COURSE INFORMATION							
Curriculum year	Course name	Code	Semester	T+U Clock	Credit	ECTS		
	CIRCULATION SYSTEM, HISTOLOGY AND DEVELOPMENT OF BLOOD AND LYMPORETICULAR ORGANS		I	3+2	4	6		

Language of the Course	Turkish				
Course Level	Master's Degree				
Department/Program	Histology Embryology				
Education Type	formal				
Type of Course	Optional				
Prerequisite Courses	no				
Department/Program coordinator	Prof. Dr. Mehmet Yüncü				
Course Supervisor(s)	Asst. Prof. Çiğdem Karaca				
Course Assistants	Asst. Prof. Ayşegül Burçin Yıldırım Asst. Prof. Mustafa Öztatlıcı				
Course Objectives	Students taking the course should have knowledge about the histology and development of the circulatory system, blood and lymphoreticular organs.				
Course Content	Cardiac development and anomalies, heart histology; arteries, veins, arterio-venous anastomoses, portal system and its locations, lymphatic system and lymphatic vessels, blood tissue, hemopoiesis, lymph nodes, tonsilla, thymus, spleen, bone marrow histology				
Teaching-Learning Methods and Techniques Used in the Course	Face-to-face education, homework, presentation-seminar, quizzes, midterm exams, Laboratory, Research				
Course Internship Status	No				

Course Learning Outcomes

- ${f 1.}$ To have general information about the histology of the circulatory system, blood and lymphoreticular organs
- 2. Explain the development of the circulatory system, blood and lymphoreticular organs.
- 3. Explain the histological structure of the tissues forming the circulatory system, blood and lymphoreticular organs.
- 4. Will be able to explain the cell types and properties of the circulatory system, blood and lymphoreticular organs.
- 5. Will be able to explain anomalies of circulatory system, blood and lymphoreticular organs.

COURSE FLOW								
Week	Topics							
1	heart histology							
2	Histology of arteries and veins							
3	Arteriovenous anastomoses and portal system histology							
4	lymphatic vessels histology							
5	Examination of Cardiovascular Histology Preparations (Laboratory)							
6	blood tissue histology							
7	Histology of blood tissue shaped elements							
8	Article Hour - Seminar							
9	Hematopoiesis							
10	Examination of blood tissue preparations (Laboratory)							
11	Lymph Node histology							
12	Tonsilla and thymus histology							
13	Spleen and bone marrow histology							
14	Examination of Lymphoid System Preparations (Laboratory)							
15	general evaluation							

RESOURCES

- Ross M.H, Pawlina W: Histology, A Text and Atlas. Lippincott Williams and Wilkins. 2011
- Junqueira L.C: Basic Histology. McGraw-Hill Medical. 2013
- Mills S.E: Histology for Pathologists. Lippincott Williams and Wilkins. 2012
- Fawcett D.W: A Textbook of Histology. CRC Press. 1998
- Kierszenbaum A: Histology and Cell Biology. Elsevier-Mosby. 2011
- -Yüncü M: Histobul. Çukurova Nobel Medicine Bookstore, 2014
- -Eşrefoğlu Mukaddes, Basic Histology, Ema Medical Bookstore,2022
- -Eşrefoğlu Mukaddes Histology Atlas, Ema Medical Bookstore,2022

ASSESSMENT SYSTEM							
SEMESTER STUDIES	COUNT	PERCENTAGE OF CONTRIBUTION					
Midterm	1	%40					
Quiz							
Homework							
Continue							
Seminar							
Application	1	%10					
Course Specific Internship (if applicable)							
Project							
Workshop							
Presentation							
Semester final exam	1	%50					
Total	3	%100					
Contribution of Midterm Studies to Success Grade							
The Contribution of the Final Exam to the Success Grade							
Total							

ECTS / WORKLOAD CHART							
Activity	COUNTS	Time (Hour)	Total Workload (Hour)				
Course Duration (Including the exam week: 15x total course hours)	15	3	45				
Out of Class Study Time (Pre-study, reinforcement)	15	2	30				
Homework	2	10	20				
Seminar	1	10	10				
Presentation	3	5	15				
Application	15	2	30				
laboratuvar	15	2	30				
Course Specific Internship (if applicable)							
Project							
Workshop							
Other ()							
Midterm	1	1	1				
Quiz							
Semester final exam	1	1	1				
Total Workload							
Total Workload / 30(s)			182				
ECTS Credits of the Course			6				

ASSOCIATION OF COURSE LEARNING OUTCOMES WITH PROGRAM OUTCOMES

No.	Program Learning Outcomes
1	Have general knowledge about the human body
2	Have detailed information about the histological structures of human tissues and organs.
3	Learns histological and histochemical techniques
4	Have detailed information about general human embryology.
5	Learn to use research lab tools and materials
6	Improves scientific article reading and evaluation proficiency
7	Can make histology laboratory applications to undergraduate students
8	Gains a general vision about basic medical sciences
9	Provides the necessary knowledge to participate in the doctoral program
10	Provides the competence to be a researcher in multidisciplinary research

Learning	PO1	PO2	PO3	PO4	PO5	P06	P07	PO8	PO9	PO10
Outcomes										
LO1.	4	5	2	2	3	4	5	5	5	5
LO2.	4	2	2	5	3	3	5	5	5	5
LO3.	4	5	4	3	4	4	5	5	5	5
L04.	4	5	3	4	4	3	5	5	5	5
LO5.	4	5	2	3	3	4	5	5	5	5

LO: Learning Outcomes PO: Program Outcomes								
Contribution Level	1. Very low	2. Low	3. moderate	4. High	5. Very High			