



GAZIANTEP ISLAMIC SCIENCE AND TECHNOLOGY UNIVERSITY
GRADUATE EDUCATION INSTITUTE
COURSE CONTENT FORM

	COURSE INFORMATION					
Curriculum year	Course name	Code	Semester	T+P Hour	Credit	ECTS
	Sensory Organs Histology (Eye, Ear, and Skin) and Development		I or II	2+2	3	4

Language of the Course	Turkish
Level of the Course	Master's Degree
Department/Program	Histology-Embryology
Education Type	Formal
Type of Course	Elective courses
Prerequisite Courses	No
Department/Program coordinator	Prof. Dr. Mehmet Yüncü
Course Supervisor(s)	Prof. Dr. Mehmet Yüncü
Course Assistants	Asst. Prof. Üyesi Mustafa Öztatlıcı Asst. Prof. Çiğdem Karaca Asst. Prof. Ayşegül Burçin Yıldırım
Course Objectives	Learning the histological structures and embryological development of the eye and its auxiliary formations. Learning the histological features of the structures that make up the ear and their embryonic origins and development. Learning the histological structures that make up the skin and their embryological development.
Course Content	Histological structure of the eye, layers of the eye, cornea, sclera, uvea, lens, retina, optic nerve. Outer ear, middle ear, inner ear, tympanic membrane, anvil stirrup hammer bones, inner ear and cochlea, ear ganglia. Embryological origin and development of the ear. The layers that make up the skin are epidermis dermis hypodermis; sweat and sebaceous glands, nails and hair, sensory receptors.
Teaching-Learning Methods and Techniques used in the Course	Lecture (Presentation) method, student lecture presentations, Discussing scientific articles, laboratory practices
Course Internship Status	No

Course Learning Outcomes	
1.	Explains the general structure of the eye, the layers that make up the eyeball, and the chambers of the eye. Defines the cornea, sclera, uvea layers, counts the differences, Explains the structure and function of the lens, Explains the layers of the retina, Explains how the sense of sight is formed.
2.	Explains the blood supply of the eye, counts the embryological structures that make up the eye. Explain the embryological development of cornea, sclera, uvea, retina and lens. Explain the embryological vascularization of the eye.
3.	Explains the general structure of the ear, Defines the parts of the ear, Expresses the features of the outer ear, middle ear and inner ear.
4.	Expresses the structure of the cochlea, bony labyrinth and membranous labyrinth, Explains the formation of the sense of hearing, Explains the sense of balance.
5.	Defines the layers that make up the skin. Explains the special function cells of keratinocytes and epidermis. Explains the structures and functions of glands in the skin. Explains the structural features of nails and hair, explains the special receptor structures and functions in the skin.
6.	Expresses and summarize the development of the skin and its glands. Explains the development of nails and hair follicles.

COURSE FLOW	
Week	Topics
1	General structure of the eye
2	Histological structures of the cornea and sclera
3	Histological structures of retina and lens
4	Embryological development and congenital malformations of the eye
5	General structure of the ear
6	Outer, middle and inner ear structure
7	Midterm exam
8	Innervation and blood supply of the ear
9	Embryological development and congenital malformations of the ear
10	General structure of the skin and its layers
11	Keratinocytes and special-functional cells of the skin
12	Sweat, adipose and Sebaceous Glands
13	Development of the skin and glands
14	Development of hair and nails
15	Semester final exam

RESOURCES
<ul style="list-style-type: none"> - 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 Tıp Kitapevi, 2014

ASSESSMENT SYSTEM		
SEMESTER STUDIES	number	PERCENTAGE OF CONTRIBUTION
Midterm	1	%40
Quiz		
Homework		
Attending the course		
Seminar		
Practice	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 TABLE			
Activity	number	Time (Hour)	Total Workload (Hour)
Course Duration (Including the exam week: 15x total course hours)	15	1	15

Out of Class Study Time (Pre-study, reinforcement)	15	4	60
Homework			
Seminar	1	10	10
Presentation	4	5	20
Practices	15	2	30
Lab	15	1	15
Course Specific Internship (if applicable)			
Project			
Workshop			
Other (.....)			
Midterm exam	1	1	1
Quiz			
Semester final exam	1	1	1
Total Workload			122
Total Workload / 30(s)			
ECTS Credits of the Course			4

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 Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
LO1.	4	5	2	2	3	4	5	5	5	5
LO2.	5	4	2	5	3	3	5	5	5	5
LO3.	4	5	2	2	3	4	5	5	5	5
LO4.	5	4	2	5	3	3	5	5	5	5
LO5.	4	5	2	3	3	4	5	5	5	5
LO6.	5	4	2	5	3	3	5	5	5	5
LO: Learning Outcomes PO: Program Outcomes										
Contribution Level	1. Very Low	2. Low		3. Medium		4. High		5. Very High		