## Anatomy of the cardiovascular system theoretical course plan

Semester: Second	<b>Year:</b> 2024-2025			
M.D. and MBBS Program Course Syllabus				
<b>Course Title:</b> Anatomy of the cardiovascular system theoretical	<b>Department:</b> Department of Anatomical Sciences			
<b>Course Code:</b> 1234099	Instructor: Dr. Hossein Salehi and Dr. Mohsen Asgari			
Location of teaching the course: Class 204	Credit Hours: 17 hours			
Prerequisite: none	Credit Units: 1			
Office address: Faculty of Medicine, Department of Anatomical Sciences				
Tel: 031-37929157	Email: ho_salehi@med.mui.ac.ir			
Number of students :55				

#### **Brief course description:**

This course covers the cardiovascular system from the standpoints of embryology and anatomic and histologic structure of cardiovascular system.

#### **Learning outcomes:**

On satisfying the requirements of this course, students will have the knowledge and skills to:

- 4- Describe the major histological structures of heart.
- 5- Identify and describe the major histological structures of vascular system.
- 6- Identify and define key structural and molecular elements involved in each stage of heart development, and the precursors of each structure.
- 6- Construct a temporal sequence of key events in each developmental period.
- 7- Explain and identify normal heart development and identify anomalies in development of heart through a comparison of normal and abnormal development.
- 8- Integrate and apply embryology to adult human gross anatomy

#### References (Text books):

- 1- Histology textbook: Basic histology: Text & Atlas (chapter 11)
- By: Junqueira, LS & Carneiro, J (preferably the latest edition).
- 2- Langman's Medical Embryology (chapter 13) By: T. W. Sadler
- 3- Gray's Anatomy for Students

### ASSESSMANT TOOLS

The assessment tools that will be used to test students' ability to understand the course material and gain the skills and competencies stated in learning outcomes)

ASSESSMENT TOOLS	From 20
Midterm Exam (Histology, embryology and practical histology)	7.5
Final Exam (Anatomy ad practical anatomy)	11.5
Class activities	1
TOTAL MARKS	20

# COURSE SYLLABUS

Chapter	Page	Course topics	Time (Hour)	Date
Chapter 11	215-235	Histology of Cardiovascular system	2	2025/01/15
Chapter 13	179-187	Formation of heart tube, cardiac loop and Development of Sinus Venosus	2	2025/01/22
Chapter 13	187-206	Formation of the Cardiac Septa	2	2025/02/01
Chapter 13	206-219	Vascular Development	2	2023/02/08
Chapter 3	126-127 143-151	Thoracic wall, sternum, rib, vertebral column	2	2023/03/05
Chapter 3 Chapter 7	133-134 151-157 715-716	Muscles of the thoracic wall	2	2023/03/12
Chapter 3	157-161	Arterial supply, venous drainage and innervation of the thoracic wall.	2	2023/03/26
Chapter 3	184-196 239 240	Mediastinum and pleuropulmonary spaces definition, contents of these spaces, pericardium Surfaces of the heart, borders of the heart, chambers, landmarks of the right atrium	2	2023/04/03

Chapter 3	196-206 209-213	Landmarks of the right ventricle, left atrium and left ventricle, coronary arteries and branches, venous drainage of the heart, Conducting system of the heart,	2	
Chapter 3	215-221 227-235	posterior mediastinum, contents of the posterior mediastinum	2	2023/04/10