



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Cardiovascular Anatomy II

2526-4-H4102D024-H4102D079M

Aims

Demonstrate advanced knowledge and understanding of the anatomical and developmental features of the thoracic cavity and respiratory system, including the main histological aspects (Dublin Descriptor 1);
Apply anatomical concepts to interpret pathological and clinical conditions such as pectus excavatum, mediastinal syndrome, and lung pathologies (Descriptor 2);
Integrate anatomical knowledge to understand functional and spatial relationships within the chest (Descriptor 3);
Communicate complex anatomical information clearly and accurately using appropriate medical terminology (Descriptor 4);
Develop independent learning skills and critical thinking abilities to apply anatomical knowledge effectively during clinical rotations and future advanced medical training (Descriptor 5)

Contents

The lessons will cover the most important aspects related to the embryological, anatomic and functional features of chest wall and respiratory system, with focus on the anatomic description of the chest wall, lung and pulmonary circulation. Students will acquire the basic knowledge required to recognize pleuropulmonary and chest anatomy and understand the location, spatial relationships and function of its most important structures including microscopic aspects. Clinical aspects related to anatomical structural abnormalities such as pectus excavatum, mediastinal syndrome, lobar pneumonia and pulmonary atelectasis, with the aid of radiological and endoscopic iconography too.

Detailed program

1. Anatomical concepts related to lung, pleural and chest wall embryology and development

2. Chest wall: anterior and posterior landmarks and anatomic border
3. Mediastinum and Thoracic cavity: landmarks, organs' content and relations
4. Pleural gross and microscopic anatomy
5. The lung: basic concepts regarding normal anatomic structure
6. Normal histology of respiratory system: structure, microscopic anatomy of trachea, bronchial tree and the functional unit of the lung: the secondary pulmonary lobule
7. Anatomical concepts related to lung and tracheobronchial tree, basic concepts of bronchial endoscopy
8. Anatomical concepts related to pulmonary and lymphatic circulation
9. Larynx and nervous system of chest wall, respiratory tree and diaphragm

Prerequisites

Basic knowledge of fundamentals of biology, genetics, morphology, histology, physiology of the cardiovascular and respiratory system

Teaching form

Preferentially synchronous format

Textbook and teaching resource

Refer to the guidelines provided in the first-year integrated teaching module "Fundamentals of Human Morphology. Lecture slides will be provided at the end of the course.

Semester

First semester

Assessment method

Integrated Written exam: 5 multiple-choice questions

Office hours

on appointment by email.

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION | GENDER EQUALITY
