

UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Anatomy of The Digestive System

2526-5-H4102D043-H4102D142M

Aims

Overall aims.

- 1. acquiring an in-depth knowledge of gastrointestinal system viscera, with a focus also on: vascularisation, lymphatic drainage, relationship with peritoneum/ligaments;
- 2. revision of the main features of the abdominal wall.

Dublin descriptors for the learning outcomes:

- 1. Knowledge and understanding: students will deepend their knowledge of the gastrointestinal system anatomy with a clinically-oriented approach;
- 2. Applying knowledge and understanding: exploiting knowledge described in point (1), students will be enabled to interpret clinical and diagnostic findings understanding if observed features are normal or not;
- 3. Making judgements: students will be able to correctly allocate clinical decision based on clinically-oriented anatomy exploitation;
- 4. Communication skills: students will deepen their ability to discuss with colleagues and patients/caregivers on clinically-oriented anatomy facts relevant to this vertical track;
- 5. Learning skills: students will deepen their ability to interpret diagnostic findings at clinical evaluation as well as during radiological/diagnostic exames (e.g., US) interpretation.

Contents

Detailed description of abdominal viscera and revision of abdominal wall main features.

Detailed program

Surface anatomy.

Surface landmarks of the abdominal wall: xiphoid process, costal margin, iliac crest, pubic tubercle, symphysis pubis, inguinal ligament, superficial inguinal ring, umbilicus, linea alba, linea semilunaris and tendinous insersections of the rectus abdominis. Abdominal lines: transpyloric plane, subcostal plane, intercristal plane. Abdominal guadrants.

Abdominal wall.

Anterolateral and posterior abdominal wall. Skin, superficial fascia, deep fascia. Muscles: external and internal oblique, transversus, rectus abdominis, pyramidalis. Rectus sheath. Fascia transversalis. Arteries, veins, lymph vessels and nerves of the anterolateral abdominal wall. Inguinal canal: deep and superficial inguinal rings, walls of the inguinal canal.

Peritoneum.

General arrangement, ligaments, omenta, mesenteries, peritoneal cavity. Relationships of the different organs to their peritoneal covering. Intraperitoneal, retroperitoneal and subperitoneal organs. Peritoneal pouches, spaces and recesses. Lesser sac and epiploic foramen. Functions of the peritoneum.

Detailed description of gastrointestinal system viscera and associated glands

Position, shape, size, parts, relations, vascularisation, lymphatic drainage, and innervation of: stomach, duodenum, cecum, ascending, descending and transverse colon, appendix, liver, gallbladder, pancreas. A specific focus is given on portal system.

Prerequisites

Knowledge acquired during the 1st year course Fundamentals of Human Morphology.

Teaching form

Didactic activities (lessons) rely on different teaching methods: the entire course is divided into 2 in person lessons in the Anatomy Room, u8/Asclepio building in Monza. Each lesson is divided into a part of a delivery nature: the teacher presents the contents using the virtual dissection table present in the Anatomy Room (Anatomage Table) to allow students to visualise the structures presented in 3D. In the second part of the lesson, the teaching is interactive: the class is divided into small groups of no more than 6-8 students, also relying on flipped classroom type activities. The students carry out exercises to consolidate the information presented in the first part of the lesson using the 3D models available in the classroom, paper and/or online teaching materials made available by the teacher and using Anatomage Table for virtual dissections personally. Gamification strategy is also part of the interactive activities: a small team tournament among the different groups is performed using the quiz mode of Anatomage Table.

Textbook and teaching resource

Treatise on Human Anatomy (Systemic Approach), Topographic Approach, Atlas - G. Anastasi G. et al.; E. Mtui (editor).

Gray's Anatomy: The Anatomical Basis of Clinical Practice, by S. Standring.

Atlas of Human Anatomy, by F. H. Netter.

Human Anatomy Atlas, by G. Anastasi, E. Gaudio, C. Tacchetti, E. Mtui.

Semester

Second semester, 5th year.

Assessment method

Eight multiple choice questions (1 correct answer out of 4 choices). Every correct answer equals 1 point, not given/wrong answer equals 0 point. This assessment will be part of the assessment of the whole vertical track.

Office hours

Upon emailing teaching staff.

Sustainable Development Goals

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