



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Anatomy and Human Histology

2425-1-H4101D002

Aims

The objectives of the course are to provide expertise in normal anatomy, cytology, histology, and embryology, with the aim to link these knowledge with clinical practice.

Teaching will include reference to topographic, radiologic, and clinical anatomy.

Practical activities using models (also virtual 3D), light microscope observations and clinical case simulations will be used to reach the teaching objectives.

Contents

The primary goal of the course is to provide a good knowledge of

- the structure and function of the different cellular types and tissues
- the embryonic development
- the gross anatomy and microscopic organization of the human body, and of the aging changes required for a correct physical examination and understanding of the diseases pathogenesis.

Teaching will include reference to topographic, radiologic, and clinical anatomy.

Practical activities using models (also virtual 3D), light microscope observations and clinical case simulations will be used to reach the teaching objectives.

Detailed program

See each module for specific detailed programs

Prerequisites

College-level scientific knowledge

Teaching form

All lessons, seminars and laboratory practice requires in-person attendance.

Part of the practical activities are interactive, with the use of light microscope to observe normal histology specimens and discuss what observed

Virtual dissections will be performed in small groups using the 3D virtual dissection Anatomage tool.

All the activities are in Italian

Textbook and teaching resource

Suggested Textbooks for Anatomy 1-2A and 2B

-G. Anastasi e altri autori. Trattato di Anatomia Umana (3 volumi). Edi-Ermes (ed), 2009.

-“Prometheus” testo-atlante di Anatomia, II edizione, 3 volumi

-S. Standing. Anatomia del Gray – Le basi anatomiche per la pratica clinica – 41° ed. EDRA

-Chiarugi. Collana Istituzioni Anatomia dell'Uomo. Opera in 5 volumi - a cura di Chiarugi, Bucciante. Piccin

-H. Ellis/V. Mahadevan. Anatomia clinica (ed. Italiana a cura di F. Cappello). Idelson-Gnocchi 2019

More on the nervous system:

-Vercelli A. Boido M. Neuroanatomia funzionale - Idelson-Gnocchi (2019)

-L. Heimer. The Human Brain and Spinal Cord –Functional neuroanatomy and dissection guide. Springer-Verlag (ed), 1995.

-Dockery P, Gruener G, Mtui E - Fitzgerald. Neuroanatomia con riferimenti funzionali e clinici- Edra

-“Barr: Il Sistema Nervoso dell'Uomo. Basi di Neuroanatomia” di Kiernan JA e Rajakumar N. II edizione. Edises (2015)

-Istituzioni di Anatomia dell'Uomo - Sistema nervoso centrale (a cura di E. Gaudio) - XII ed. - Piccin (2016)

-Istituzioni di Anatomia dell'Uomo - Sistema nervoso periferico ed organi di senso (a cura di R. De Caro) - XII ed. - Piccin (2017)

-Haines DE. Neuroanatomia nel contesto clinico. Strutture, sezioni, sistemi e sindromi. Atlante. Edi-Ermes

Atlas:

-Netter. Atlante di anatomia umana, Frank H. Netter, Editore: Edra

-Anatomia umana. Atlante. Curatori: G. Anastasi, C. Tacchetti, Editore: Edi. Ermes

Suggested Textbooks for Histology 1 and 2

Cytology/Histology

-Ross M.H. e Pawlina W. Istologia Testo e atlante. Casa Editrice Ambrosiana;

-Di Primio et al., Istologia Umana, Casa Editrice Idelson-Gnocchi

-S. Adamo et al. Istologia di Monesi. Piccin. V

Embriology

-Bertini et al., Embriologia umana. Casa Editrice Idelson-Gnocchi

-Moore, Persaud, Torchia. Embriologia. L'essenziale. Piccin

-Moore, Persaud, Torchia. Lo sviluppo prenatale dell'uomo. Edra.

-Schoenwolf, Bleyl, Brauer, Francis-West. Larsen. Embriologia umana. Edra
-De Felici et al., Embriologia Umana, Piccin

Microscopic Anatomy

-Ross et. al. Atlante di Istologia e Anatomia Microscopica. Casa Editrice Ambrosiana
-Rezzani et al. Anatomia microscopica e diagnosi differenziale d'organo. Edises
-Baldi. Anatomia microscopica del Netter. Cic Edizioni Internazionali
-Young et al. Wheater Istologia e anatomia microscopica. Masson

Semester

1st and 2nd terms

Assessment method

The exam is intended to test the knowledge and skills acquired in the different modules that make up the course and consists of an ongoing test and a final oral exam.

ONGOING TEST: is carried out at the end of the first semester to check preparation on the program carried out and focuses on the following topics: Cytology, Histology, Embryology, Head, Neck and Thoracic Anatomy (excluding nervous system and vascular system) and Locomotor system.

The test consists of 60 closed-ended questions. Each correct answer is worth 0.5 points, while failure to answer or incorrect answer is worth 0. The outcome of the test is expressed with a rating (insufficient, sufficient, fair, good, excellent).

FINAL ORAL EXAM: after the end of the Course, the judgments obtained in the ongoing test will be integrated by an interview on the topics covered in class and on the recommended texts for the intensive verification of the knowledge acquired and the evaluation of communication skills (organization of the speech, appropriate terminology for the disciplinary field). The final oral exam will focus more specifically on the topics of the Histology 2, Anatomy 2A-2B modules, but the topics of the 1st semester may also be subject to verification.

The exam also involves the recognition of a histological specimen under an optical microscope.

Office hours

Mon-Fri, by appointment by mail

Sustainable Development Goals

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